S. HRG. 101-587

ESPANOLA VALLEY AND POJOAQUE VALLEY WASTEWATER MASTER PLAN

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

MARCH 14, 1990—POJOAQUE PUEBLO, NEW MEXICO

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ESPANOLA VALLEY AND POJOAQUE VALLEY WASTEWATER MASTER PLAN

WEDNESDAY, MARCH 14, 1990

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Pojoaque Pueblo, NM.

The committee met, pursuant to notice, at 9 a.m., in Pojoaque High School, Pojoaque Pueblo, NM, Hon. Pete V. Domenici presiding.

Present: Senators Domenici and Chafee.

Senator DOMENICI. Could we have order, please?

Governor Tafoya, at the request of the Chairman of the Task force, would you please open our meeting with a prayer?

Governor TAFOYA. [Invocation given in native tongue.]

OPENING STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator DOMENICI. Thank you very much.

First, a thank you to Senator John Chafee. For those of you who don't know, Senator Chafee, sitting here on my left, is from the State of Rhode Island. Some of you might remember him from his previous public service when he was Secretary of the Navy. He has been in the United States Senate, I believe, for 15 years. Is that right, Senator Chafee?

Senator CHAFEE. Yes.

Senator DOMENICI. The reason he is here with us, obviously, is, first, we invited him, but secondly, he is the Ranking Member of the committee that is responsible for the subject of the hearing today; the Environment and Public Works Committee of the United States Senate.

You must know that Senator John Chafee is one of the lead Senators in terms of environmental cleanup in the United States. You might know that on the floor of the United States Senate, there is a bill to clean up the air of America. We haven't had a modernization of our Clean Air laws for well over 10 years and we now hope that we are going to get a new, updated Clean Air Act for the United States that will be an example for the world.

If and when that happens, I am sure you will see a picture on national television when the President signs the bill and if that occurs, it will not be a full picture unless John Chafee is there because he has been one of the lead Senators in producing that measure and in guiding it through the Senate.

The committee that he is Ranking Member of has much more to do than just clean air. The grant program that money comes to each of the States for sanitary clean-up, the highway fund monies come through that committee, many of the environmental laws come through that committee, and we thought it would be exciting to have him come to New Mexico.

We want him to get to know our national laboratories because we think they are going to play a very vital role in America in the science of clean-up and the development of new technology for environmental restoration.

We thought 3 hours here in this beautiful valley, with an opportunity to share with this Senator from a very different part of America, the kinds of problems that rural New Mexico has—we have different problems than most, Senator, because we have all the problems of rural growth, rural sanitation, and rural water, but we have a complexity of governmental jurisdictions.

We have the sovereign, independent Indian Pueblos, we have county and city and State governments. Today, you are going to hear testimony about a very unique and much heralded joint activity that was put together in this valley. As the testimony develops, you will find that we have been able to bring together the Indian people, their leaders, the counties and cities and State governments, in a very unique, master plan which, if implemented, will bring clean water and sanitary conditions to this very diverse part of rural New Mexico between the cities of Los Alamos, Espanola, and Santa Fe.

We are very proud, Senator Chafee, that under the leadership of Governor Viarrial, who is sitting right here at the table, the Indian leaders, the city and county leaders, and the State of New Mexico and their representatives, have been able to put together the funding for a master plan. Today they come before us to; one, share the kind of problems that exist; and two, share the enthusiasm and interest of their plan and talk with us about its possible implementation.

That was both a combination of background, welcome, and opening remarks regarding this day. Now, Senator, I yield to you if you have any comments. Once again, thank you so much for joining us and we hope you will be part of helping us solve this problem over the long haul as we attempt to bring together various resources—local, county, city, State and Federal—to solve this problem.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Thank you very much, Senator Domenici. I don't have to tell the folks out here what a tremendous job you are doing in Washington, D.C. for them, both in connection with the technology transfer using the capabilities of the National Laboratories that are located in Los Alamos, San Dierre, and elsewhere, using the skill of those highly qualified scientists to devote their techniques and expertise to assist private industry and thus help America become more competitive. So it is a double winner—it's a winner for the country and it's a winner for that concentration of talent.

It would be unfortunate that as we scale down defense activities to just disband all that talent that is assembled there and what you, Senator Domenici, are seeking to do is to use that talent to assist private corporations and thus keep those skills together while helping our Nation.

You were kind enough to invite me to come out today to see this unique undertaking that has been put together here. What appeals to me always is when you can get different political entities—whether it is counties, cities, or Pueblos—together to reach a common objective.

All too often these entities want to go off in their own directions, thus the total costs increases tremendously and there is, obviously, a reluctance by the Federal Government to want to fund something where the people can't get together to attain maximum efficiency with minimal costs, so I am intrigued.

I had a chance to look over the master plan that you have assembled, but I won't claim to be an expert in it by a long shot. Thus, I am looking forward to the testimony that we are going to have from the fine panels that have been assembled.

Senator Domenici, again, I want to thank you. I must say I played a little hooky yesterday. I was on the way up from Albuquerque going to Los Alamos and I saw a sign marked Bandolair National Monument. I figured, well, I've come all this distance, I might as well see a little of New Mexico, so we went up into the valley and saw the excavations that have been done there, the dwellings in the cliffs.

I come from a State that can be put between here and Albuquerque practically, so I wanted to come out here where the big west is with all its fascinations. I am just very, very happy to have this opportunity to be with you. Thank you.

Senator DOMENICI. Thank you very much, Senator Chafee. Also, I might say, because he walked around a little bit up there at Bandolair, he arrived last night and he said he had worked very hard and he wanted to go to bed, so we had to call off the Los Alamos meeting a bit early. Actually it was because he came from Washington, it was really 11:30, but essentially he did use the excuse that he got to walk—he said—all over New Mexico.

Let us proceed. Senator Chafee has asked that I preside because of my familiarity with both the people and what is going on in our joint venture.

The first panel consists of Governor Viarrial, Chairman, Pojoaque and Espanola Valleys Wastewater Steering Committee. Governor, would you proceed? Do we have Casey here? Casey, we have you here to welcome us and we should have called on you sooner.

STATEMENT OF CASEY MARTINEZ, SUPERINTENDENT, POJAQUE VALLEY SCHOOLS

Mr. MARTINEZ. Good morning. I am Casey Martinez, Superintendent of the Pojoaque Valley Schools. I'd like to welcome all of you to our school district this morning; I'd like to welcome Senator Pete Domenici of New Mexico and thank him for all of the fine work that he has done in the past and continues to do for us in the State and also in Washington, D.C.

Senator, I'd like to welcome you to our school district, a school district that has clean and clear water, and exceptionally fine educational in-depth evaluations.

I'd like to also welcome Bernie. Bernie, it's nice seeing you again. I'd like to welcome you to the district that has most of New Mexico's finest teachers working in the district. We are glad to have you here this morning.

Senator Chafee, it's nice to have you here this morning too. You are visiting, Senator, a school district that's graduating seniors who, at a rate of 70 to 75 percent, go on to post secondary training. We are very proud of that. I think the neighbors in the Valley are very happy with that and honor, respect, and work very well with our teachers. They are the strength of this school district. We welcome you and thank you for being here.

I'd also like to welcome Barbara Goetz from the Environmental Protection Agency, Region IV. Barbara, I welcome you to Pojoaque, the home of Representative Ben Lujan who is with us this morning. Thank you for being here, Ben.

To all of you, Senator, thank you very much. I'd like to introduce Governor Jacob Viarrial and welcome everyone. Representative Louis Sanchez is here also.

Senator DOMENICI. Thank you very much, Casey. You will meet another member of our legislature from Los Alamos. Right there on your left is State Senator Steve Stoddard, a long-time representative of the people in this area. We are very proud to have him with us today also.

Governor Viarrial, would you proceed?

STATEMENT OF JACOB VIARRIAL, GOVERNOR, PUEBLO OF POJOAQUE AND CHAIRMAN, POJOAQUE AND ESPANOLA VALLEYS WASTEWATER STEERING COMMITTEE, ACCOMPANIED BY TIMOTHY GLASCO, MOLZEN-CORBIN & ASSOCIATES; AND STEVE ANDERSON, LEE WILSON & ASSOCIATES

Governor VIARRIAL. Thank you very much, Senator Domenici and Senator Chafee. Again, I'd like to welcome you and thank you very much for being here. I've waited almost two years for this moment and now I don't know what to say.

Senator Chafee, I'd like to thank you, as was mentioned by Senator Domenici, for the support you gave us when the issue of clean air came up. I thank you very much for that.

I got involved with this committee in 1987 when I was approached by the various members of our congressional delegation in Washington. The State had given approximately $75,000 to the people in this area to conduct a study. However, there was a requirement that if the steering committee got going, the six tribes in the study area each gave $5,000 and then the other local communities gave $10,000 for approximately $115,000 total.

We had no guidelines, nothing to start with. The first thing I did was to call a meeting with all the entities involved. I told them we need to address this serious problem. We just can't pick up and move away once the water becomes contaminated. We need to do something about it at this time.

We had election of officers. Someone put up their hand and said, I nominate Jacob Viarrial as chairman, so I continued talking and from there we elected a vice chairman, who is Mr. Tom Wilson, the Land Administrator for the County of Santa Fe. In addition we also elected the representative from the Pojoaque School District as Secretary.

We decided we would not establish a quorum but we would conduct business with whoever came to these meetings. So that's the way it has been. I am happy to report we have had real good participation.

Once the committee was formed, we used Espanola as a fiscal agent. The committee formed an ad hoc technical committee to set up the scope of work and then to advertise for a consultant. Out of 20 consultant engineering firms that answered the ad hoc committee finally chose Molzen-Corbin with Mr. Lee Wilson to do the study.

Senator DOMENICI. Governor, if you prefer to sit down, you certainly can. Do whichever you prefer.

Governor VIARRIAL. After we chose the consultant, they worked hand-in-hand with the committee and the study was completed in July of last year.

There were several recommendations of immediate need, the first one being that no where in the study area—it encompasses about half a million acres.

Senator DOMENICI. Governor, I wonder if you might, and perhaps Senator Chafee would find this interesting and helpful, I wonder if the engineer or the representative of the consulting firm might at this point just give us an overview of the area and what was basically found, not the conclusions, but what kind of environmental problems regarding water and sewer were found so that we might have an idea?

Senator CHAFEE. And the population. What numbers are you dealing with as far as population goes?

Governor VIARRIAL. Senator, that was my recommendation at first and he told me, no, you do it.

Senator DOMENICI. If you will identify yourself for the record, so we will have your name.

STATEMENT OF TIM GLASCO, MOLZEN-CORBIN & ASSOCIATES

Mr. GLASCO. My name is Tim Glasco. I am with the engineering firm of Molzen-Corbin & Associates. Over here we have Steve Anderson who is with Lee Wilson & Associates. Lee Wilson's primary responsibility in developing this plan was in developing population and land use data. Our participation was primarily in the evaluation of existing facilities and recommendations for new facilities.

I will go over just briefly a little bit of the findings and recommendations of the report for you.

As you can see, the study area goes from the upper Rio Grande Valley around Dixon down through the Rio Grande Valley approximately to White Rock, which is close by Los Alamos, up the Santa Clara Valley on the Santa Clara Indian Reservation, up the Santa Cruz Valley, up the Pojoaque and Tesuque Valleys and includes the Pueblos of Nambe and Tesuque, approximately half a million

acres in the total study area of which probably half to three-quarters of that is under development to some extent at the present time, so there is quite a bit of land in use.

Senator DOMENICI. What do you mean then? Do you mean there are sporadic kinds of development? Certainly there is not concentrated development?

Mr. GLASCO. There are isolated pockets of concentrated development. For instance, the Village of Alcalde is very old, very concentrated, close-spaced houses, primarily on cesspools rather than septic tanks, a tremendous ground water problem in that area, ranging down to the valleys themselves exhibiting typical southwestern type land use which is long, narrow development, some lots 30 to 60 feet wide and maybe 1,000 feet long with a house and septic tank stair-stepped next to each other like that.

When you look at the development, the houses are fairly concentrated in some areas, then you have large areas of forest land and desert that is not developed at the present time.

Senator CHAFEE. What is the population in that area?

Mr. GLASCO. Steve, I'll defer to you for that.

Mr. ANDERSON. The total population is about 125,000.

Mr. GLASCO. The first thing we looked at in the report was the ground water situation. We utilized data from the New Mexico Environmental Improvement Division through their Water Care Program where they invite people to bring samples from their home water wells in to be analyzed.

We developed this map here to show the collated results of the Water Care data. We were only looking at nitrates right here. This, incidentally, is in your report at Figure 3.2 in the beginning of it in the executive summary if you have copies.

The red indicates exceedence of the 10 milligram per liter nitrate drinking water standard. The yellow indicates values that are elevated but have not yet exceeded that standard. The green indicates the samples that were at a fairly safe level.

There are two things I want to stress about that. One is we didn't have data from every place. This only represents the data that we had. We didn't have the budget in this particular study to go in and do a comprehensive sampling of all the water wells in the area.

The second point I'd like to make is in the Pojoaque Valley and the Nambe Valley area, it looks primarily green showing that there were not elevated nitrate levels in the water here, however, we did find instances of coliforms, taste and odors in the drinking water and in some cases, I believe elevated manganese levels in some of the well samples as well, which are indicative of contamination from cesspools and septic tanks as well.

The soil conditions are such that the nitrogen does not show up in the nitrate form, so these green circles are a little bit misleading in that area. We are thinking the ground water contamination in this area—in the lower Pojoaque Valley especially—is probably getting close to the severity that we see in the northern areas up around Chamita and Hernandez.

Existing facilities in the area, each of the Pueblos has wastewater facilities that have been installed by the Indian Health Service. Those facilities consist of lagoons, which in some cases are

unlined and fairly old and in great need of repair. In fact, we have identified at least two of those lagoons as primary culprits for some of the contamination we're picking up in drinking water in the area, so just having the facilities doesn't necessarily mean that we are getting clean water as a result.

The city of Espanola has a municipal wastewater system and that's about it. The rest of the area is on cesspools and septic tanks, again with the older village areas around Chamita, Alcalde, Tesuque, the old, traditional villages, generally are developed on cesspools. The more recent, say the last 30 or 40 year type development, is primarily on septic tanks.

The facilities that we recommended, I'll just lay it out very briefly and if you have more detailed questions, we can go into those later.

The first priority that the committee decided should be addressed was the lack of septage facilities. In the State of New Mexico right now, if you cannot take the waste that is pumped from a septic tank to a municipal wastewater treatment facility, you basically have no legal place to dispose of this material. That puts the septage haulers between a rock and a hard place so to speak.

The City of Espanola wastewater treatment plant is not large enough to accommodate the volumes of septage that we are seeing coming out of this area. Therefore, the most cost effective means that we came up with for dealing with this was for two septage disposal facilities—one located in the northern area and the other one located down around Premonqe or Pojoaque.

The second recommendation of the plan was to install wastewater collection and treatment facilities for those areas which have immediate threat to the health of the citizens and the environment. That is the Village of Chamita, which is located right here—you can see where it has a very large red area—the Village of Alcalde located right here; across the river in the area of Hernandez; and then down in the Pojoaque Valley to service the Nambe Village and North Pojoaque Village area.

The overall concept of these facilities is that eventually they will be tied together to one large facility where we can get a little better economy of scale and an operation will be more cost effective to operate.

At the present time, we are proposing sewering this area with a small package type wastewater plan, and the same with all of these. They will be such that eventually lines can be laid to tie them into the City of Espanola and 40 to 50 years from now, the City of Espanola plant would be greatly enlarged to accommodate all of this flow from all of these areas coming into here.

Similarly, the plant in this area would eventually, when they've reached the end of their useful lives, be withdrawn from service and a larger plant to accommodate basically the Tesuque Valley and the Nambe and Pojoaque Valleys, would be built somewhere close to the confluence with the Rio Grande River. So we would have two large wastewater facilities but again, we are talking master plan, 50 years or so from now.

The immediate need, both from the public health point of view and something that is reasonably affordable, are for the recommendations that you see right here.

The last recommendation of the committee was for the formation of, for lack of a better word, we call it management entity. This entity would be a joint venture between the six Indian pueblos in the planning area and the City of Espanola, the two counties of Rio Arriba and Santa Fe.

The details of exactly what all would go into that have not been worked out. That's going to take a little bit of time and some lawyers. We have a lot of issues of sovereignty, of that sort of nature that are to be considered.

Senator CHAFEE. What has been the population growth in the area over the last decade say starting in 1950 and bringing it forward, not exactly but just roughly? Is that in the report? What do you project as the growth rate in the future, as closely as you can estimate?

Mr. ANDERSON. That's in the report around page 237.

Senator DOMENICI. Can you find it in there?

Mr. ANDERSON. Yes.

Senator DOMENICI. If you'd do that, we'd appreciate it.

While you're looking, Senator Chafee, I would like to recognize someone that is here that we missed. Kay Roybal is representing Congressman Richardson here today. I want to thank you for coming Kay, and I want to publicly congratulate Representative Richardson. He and I started on this project some time ago, as you recall, Governor Viarrial, and the working arrangement has been very, very good.

We have both encouraged in the strongest, yet most polite way possible, the formation of this group to do this joint work and enter into the joint funding of the planning and it has been a pleasure working with him. I want you Kay, to take that thought on my part to the Congressman. I understand he is in session or he would be here. The United States Senate is out this week; the United States House has decided to vote, so he can't be here and there. Thank you for attending.

Mr. ANDERSON. On page 268, there is a table that summarizes the growth of the separate valleys over the last 25 years. For example, Rio Chama has grown 1.5 percent per year.

Senator CHAFEE. What was the percentage?

Mr. ANDERSON. About 1.5 percent per year for the central area. That is about the average per year.

Senator DOMENICI. Could I just follow with a question? Frankly, the population growth seems to me to be a little bit misleading in that while it may not be significantly high, certainly below the national average growth, certainly below New Mexico's average growth over the same period, it seems to me as one who has lived here and watched things that there is greater demand on the aquifer and on the overall system than the 1 percent change per year would indicate. There seems to me to be more buildings, more facilities, more demand and need for septic tanks and sewage type treatment. Is that a fair evaluation on my part? I don't think that's changed at 1 percent a year; I think that's changed dramatically in the last decade, from talking to people and just seeing things.

Mr. ANDERSON. I think that is true. It has been very concentrated, whereas the soil doesn't really allow you to use outside systems. One of the major problems, I think, is that as community water

systems have been installed, lot sizes have gotten smaller and more pollution has gone in groundwater, it's gotten worse.

Senator DOMENICI. Governor.

Governor VIARRIAL. I'd like to make a couple of points here. We have pursued the recommendations of the plan aggressively. We don't want to shelve it and let it gather dust. We have aggressively pursued it.

The other recommendation is we need to do a water quality study to get potable water to the different entities in the study area. We received a grant of $60,000 from the Interstate Treatment Commission and now we're working with the Bureau of Indian Affairs and IHS to see if they can help us with the additional $35,000 for a total estimated cost of $95,000 to do that study.

In addition, Senator, because this is a unique situation—he mentioned the jurisdictional issues—we don't know what we're going to come across in getting a joint policy agreement and the management system in place. It might necessitate changing some laws or making new ones, I don't know, but we would like to ask your support if we run across those situations.

Thank you.

Senator DOMENICI. Senator, I think it might be appropriate so we finish on time if we let the rest of the panel give their statements and then perhaps we can inquire of all of them. Is that fair enough?

Senator CHAFEE. Sure. Good idea.

Senator DOMENICI. All right. Let us proceed. Governor, we have a panel here, but who did you want to go next?

Governor VIARRIAL. I'd like to ask Senator Stoddard.

Senator DOMENICI. Senator Stoddard, would you proceed?

STATEMENT OF HON. STEPHEN STODDARD, STATE SENATOR, NEW MEXICO SENATE

Senator STODDARD. Thank you, Senator.

First of all, I'd like to welcome a fellow New Englander to this part of the country. I came through and fell in love with this State 40 years ago. I think if you were staying much longer, you too would fall in love with it and leave Rhode Island as I left Connecticut.

Senator DOMENICI. But we couldn't have three Senators, so you'd better let him go back.

Senator STODDARD. I have followed closely the activities of the Pojoaque and Espanola Valleys Wastewater Steering Committee, and have been an active participant in many of their meetings. I have reviewed the published Master Plan and support the recommendations presented in that plan.

This is truly a unique rural area, and I am especially impressed with the rare cooperation between the local Indian and non-Indian governments, the water users associations, and citizens of all distinctions to solve a common problem.

Ground water contamination is a major concern in this area which is ground water-dependent for its potable water source. I sincerely hope the members of this Select Committee take the efforts of the Pojoaque and Espanola Valleys Wastewater Water Steering

Committee seriously and help them obtain the resources necessary to implement their Master Plan.

The willingness on the part of all the participants to develop and enter into joint powers agreements is an important step forward in the establishment of a management authority to tax, serve, and enforce standards and codes in this region. With adequate funding, this can be accomplished and will serve as a model for similar rural communities nationally.

Thank you, gentlemen.

Senator DOMENICI. Thank you very much, Senator.

Governor VIARRIAL. Governor Tafoya from Santa Clara and Chairman of the Eight Northern Indian Pueblos Council.

Senator DOMENICI. Governor, glad to have you.

STATEMENT OF CALVIN TAFOYA, GOVERNOR, SANTA CLARA PUEBLO, AND CHAIRMAN, EIGHT NORTHERN INDIAN PUEBLOS COUNCIL

Governor TAFOYA. Good morning, Senators Domenici and Chafee, Mr. Viarrial; Representatives Lujan and Sanchez, good morning; and fellow governors from Pueblos.

I'd like to thank Mr. Martinez for his kind words about my athletic abilities but I think he is a greater athlete than I am, so thank you again and thank you for the use of the facilities.

As Governor Viarrial said, I am the Governor from Santa Clara Pueblos and also the Chairman for the Eight Northern Pueblos. There are six tribes that are represented here out of the eight northern in this study group. The two tribes that are most northern—which is Picuris and Taos—are not included in this study because of the region that they are situated in.

The Pueblos of San Juan, Santa Clara, San Ildefonso, Nambe, Pojoaque and Tesuque are involved in this study. The six have been historically very much involved as far as participation and support of this whole project. I'd like to reiterate the fact that as we gain momentum, we will continue that support and keep abreast, even though there is a change in the leadership of the Pueblos, we will continue with that support.

This study, initiated back in 1985, involved the Pueblos and like the Senator mentioned, involved the entities—the city government, State or county government, and the tribal governments and local business people. It is a very unique and interesting type of organization.

I was going to read my whole four page thing but I said no, what I'll do is summarize it in a story. When I was working at the bank—that's what I was doing before I became Governor—an elderly Indian man used to come into the bank monthly to cash his social security or whatever check.

One month he would come in with a big old sombero and he would throw it in the middle of the lobby and do a hat dance. He called it his Mexican hat dance. The next month he'd come in dressed up as a cowboy—he used to tell a lot of cowboy jokes and come in singing cowboy songs. The other months he might come in singing Indian songs.

He would go up to the teller or one of the secretaries and sing an Indian song and tell them it was an Indian love song. I knew better, it was just a lowered version of a corn dance, but the girls didn't know any better.

What I'm getting at is the cultures that were involved in this gentleman's efforts to entertain are the cultures right now that are uniting together to get a common concern addressed which is the wastewater and how it's polluting our drinking water and affecting our future.

The development that most of the Indian tribes are trying to go after in the pursuit of self-sufficiency is going to be hampered if we don't have good drinking water, if we don't have the wastewater system in place. I feel that the area we are concerned with and how we are going about it is very critical. We need that management system that the representative from the study group mentioned. It is very important.

I feel very confident now that the system in place, as far as all the entities involved, is working fine but I'm looking, 10, 15, 20 years from now. I don't know if that same unity might exist, but if we have a structured management system, a little entity on its own that will govern this whole thing, then I know that the project will continue and will flourish.

I'd like to close by telling another little story that happened at the bank. This time it was another elderly gentleman of Spanish descent. He came in and he said, you're Indian, aren't you? I said, yes, I am. He used to joke a lot and he says, do you know that the Indians, because they were here for a long, long time, have pretty much control of all that land around this area—Espanola and Pojoaque Valley? I said, I realize that.

Then he came back and he said, and the Spaniards came after that and they conquered, you reconquered and the fight went on but now in this area, the Spanish people pretty much control politics because of that. I said, that's pretty much in line.

Then he said, now we come with the Anglo, they haven't been here that long, but they have all the money, but right now with this project, they don't have enough money. That's why we're looking for you guys to help us. We need that support.

We might have the land, we might have the politics, but the money isn't all there yet.

Thank you for the time.

Senator DOMENICI. Thank you, Governor. Who is next?

Governor VIARRIAL. Tom Wilson.

Senator DOMENICI. All right, Tom.

STATEMENT OF TOM WILSON, DIRECTOR OF PLANNING, SANTA FE COUNTY

Mr. WILSON. Thank you, gentlemen.

My name is Tom Wilson. I am Director of Planning, Santa Fe County. I am here representing the Board of County Commissioners, Santa Fe County. Mr. Raymond Chavez is the Chairman, Commissioner Linda Grill, Commissioner Nancy Rodriguez and the County Manager, Mr. Gil Triseto.

Santa Fe County has been an active participant in this project from the inception. The county commitment to environment concerns and management has its genesis in the County Comprehensive Plan and Land Development Code adopted in 1980. These documents address environmentally sensitive development issues and regulate them on a performance basis to allow optimum development densities and relationships.

Senator DOMENICI. Tom, can you show us where the Santa Fe County line is on there? It's basically two counties?

Mr. WILSON. That's correct, sir.

Senator DOMENICI. Go ahead, Tom.

Mr. WILSON. Thank you.

Additional current and anticipated future development pressures have caused the County to look at the need for an even broader, more comprehensive approach to these environmental management questions that seem to have come out. The proposed wastewater management plan solutions address some of these concerns.

Santa Fe County has made a long term commitment to responsible growth management to insure quality growth, and we consider our continued participation as integral to this process. The Board of County Commissioners has publicly endorsed creation of regional water and sanitation systems and the associated administrative entities necessary for the successful operation.

The creation of, and participation in, the management organizations necessary for these proposed water and wastewater systems are clearly a necessity if we are to ensure the highest quality of life everyone aspires to in this area.

Santa Fe County has historically taken the lead in innovative growth management systems. The County will continue to offer necessary support as required, including technical, professional, analytical, legal and monetary.

The unique set of circumstances that allowed approximately 16 disassociated public and private entities to enter into this cooperative venture should not be ignored. The seriousness of the problem, the clear and correct direction of the solution have worked together cause any differences of opinion to be set aside for the greater good.

It is for these reasons the County of Santa Fe asks for your serious consideration and support in this funding request.

Senator DOMENICI. Mr. Romero.

STATEMENT OF HON. EMILIO NARANJO, STATE SENATOR, NEW MEXICO SENATE, PRESENTED BY JOE B. ROMERO, COMMISSIONER, RIO ARRIBA COUNTY

Mr. ROMERO. I want to apologize for Senator Naranjo not being able to be here this morning. I am going to read his testimony.

Members of the congressional delegation and Governor Jacob Viarrial, in reference to Espanola Valley and Pojoaque Wastewater Master Plan, I very strongly support the Espanola Valley and Pojoaque Wastewater Master Plan. The conditions in this area mentioned in the report where water testing in private wells in Rio Arriba County and the City of Espanola have been found to be contaminated, because of these findings, we have found out that this problem keeps worsening.

Having the congressional delegation and other governmental entities present at this meeting, I hope you give this matter your utmost consideration.

Mr. ROMERO. I campaigned in Santa Clara about 2 years ago; I was running for County Commissioner. We had our rally by the corral in Santa Clara. Also other officials were with me. Every time I made a promise to the people from Santa Clara, they bowed their head.

As I started to depart from the platform, an elderly man says to me, Roberto, be careful, don't step on that——

Senator DOMENICI. Thank you very much, Mr. Romero.

Let me recognize someone that we didn't recognize earlier. Is Governor Gilbert Hill from Tesuque still here? We just want to thank him for attending and if he is out there, tell him we recognize and appreciate his cooperation.

Let me just take a minute and then I'll yield to you, Senator Chafee. Let me ask, first, do I gather correctly that with the testimony of Santa Fe County here today through the Planning Director and Rio Arriba with one of the Commissioners, that the counties of Santa Fe and Rio Arriba as counties support this and have participated in a regular manner as other jurisdictions?

Governor VIARRIAL. Yes, Senator, from the beginning.

Senator DOMENICI. Have both of those counties contributed some resources and/or technical assistance to the overall plan?

Governor VIARRIAL. Santa Fe County has put in $12,000; Rio Arriba has not made a contribution yet at this time. When we approached them, they hadn't put it in the budget, but we have had their support. They have been to our meetings, so that is very important also.

Senator DOMENICI. Let me ask just one last question. Even though we don't yet have a so-called management entity in existence to the joint powers laws of our State and perhaps national, is it fair to say that we have a concurrence that we ought to proceed with this priority and if we together get the $2.2 million for the very first critical item, the septic treatment disposal facility, that every group that's in this would agree that is what we ought to do first?

Governor VIARRIAL. Yes, Senator, you're right.

Senator DOMENICI. My second question is, in an area as large as this to plan for the long term future is very exciting to me, but what is even more important is if we could get concurrence on the second phase. Is there general concurrence that the way to handle the intermediary, the next phase, is through those four facilities?

Governor VIARRIAL. Yes, Senator, you're correct.

Senator DOMENICI. So if I understand correctly, if we can proceed to keep the group together and find various sources of funding from each, we can get some Federal money and State money, we can proceed and everyone will do their share even though it's not in their own backyard necessarily?

Governor VIARRIAL. Yes, Senator, that's the commitment we received from each entity. I'd like to add, Senator, if I may that I thought it would be difficult to keep this group together, but it wasn't. It was very easy because we have a common problem, so everybody has been cooperating tremendously.

Senator DOMENICI. Senator Chafee.

Senator CHAFEE. Thank you, Senator Domenici.

First, I want to say it seems to me that it is terribly important that the group stay together. If somebody drops out because they think they can get it on the cheap without putting up their money, obviously it destroys the entity, so I think you have done a masterful job, Governor, in keeping these units together.

Governor VIARRIAL. Thank you.

Senator CHAFEE. Let me ask you a question. What is the State's reaction? As you know, under the Clean Water Act, construction grants money goes from the Federal Government—we start off with $2.4 billion, now that's scaled down a little bit—that goes out to the States and then the States allocate it. In other words, we in the Federal Government don't allocate it below the States; we get it to the States on a formula. You can argue with the formula one way or another.

In any event, the formula has been generally accepted so we give it to the States and whether States give it to you or to Santa Fe or to Albuquerque is the State's decision. Where do you stand on the priority list with the State? I suppose like most communities, you're way down the list?

Governor VIARRIAL. To better answer that, I'd like to call the representative to the State to answer that, Senator.

Senator CHAFEE. I may be jumping ahead here. Are you a later witness. I'm sorry, excuse me. We'll handle that later.

Senator DOMENICI. Also Senator, when we get to panel three, we are going to find other sources of financing that are not terribly conventional with reference to your scenario because that is usually State and then it's a city. We have, in this case, the Bureau of Indian Affairs which must spend money in this area in the next 15 or 20 years as they have in the past, and we want to make sure that they are on board. That is also the Indian Health Service.

We will be inquiring of them but is it fair to say they've been on board and they have urged the contribution of Federal money to the study and have been helpful technically?

Governor VIARRIAL. Yes, Senator. As a matter of fact, the first $30,000 that each tribe contributed did come through the Bureau of Indian Affairs.

Senator DOMENICI. Thank you all very much. It was a pleasure having you with us.

Governor VIARRIAL. Senator, may I make one last comment?

Senator DOMENICI. Of course.

Governor VIARRIAL. I don't know how to say this in a very diplomatic way. We have worked very, very hard in this committee. All the work that we have done after the money was expended has been out of each individual entity's pocket.

We have had a good relationship with you. You have been very interested in this, our congressional people have. The only problem that we are having—and I think it is because they don't understand it completely—is when we go to the State legislature to help us with funding this issue, we have a concern—I understand the money is pretty tight but we would like to have our State, our representatives and legislators, get more in tune with what we are doing because it does cover a large portion of the State of New Mexico.

Thank you, Senator. I don't mean that as a putdown but it's a big concern to us and someone had to bring this up.

Senator DOMENICI. Let me say to you, Governor, and all of those who are on the task force, we have some very influential Representatives and Senators here at this meeting and many are interested in this, speaking now of the State. I think we have to begin now, as a group—and I will be helpful where I can—to get them together and begin to share the importance of this in terms of saving money in the future, of using joint facilities which are going to save over the long run and then we will have to find a way, through either the Bureau of Indian Affairs or others, to show our good faith by finding some Federal money for this too so we can tell Ben and others, and Steve, we are going to do our share because there is a major Federal role that is not ordinary to a city/national relationship. We will have to do that.

I want to close by saying, even though we are going to hear more from interested people, I really think somebody used the word "model." I don't know whether it is literally the first of its type but frankly, I believe for our State, it is absolutely a model.

If we can do this with this many entities joining up and saying we'll forget about our individual existence and contribute to the whole, I think we have a chance for some unique rural, both sewer and water cleanup facilities in this era of environmental clean up. I think it is going to be a real model for us in the future and I compliment all of you for getting it done.

Governor VIARRIAL. Thank you, Senator. Senator Chafee, thank you.

Senator DOMENICI. Let's take our second panel. If you will help us organize it, Governor, there have been some changes, make sure we've got the right people.

Is Carlos here? Carlos, you're here. Herman Agoyo? Dennis Kirkwood, is Dennis here? Do we have Lucy Hilgendorf, President of Western Network?

Ms. HILGENDORF. Yes.

Senator DOMENICI. George Gomez. All right. Carlos, do you want to lead off? If you have prepared statements and they are lengthy, would you make them part of the record and summarize your statement for us, please?

STATEMENT OF CARLOS JULIEN ON BEHALF OF THE ESPANOLA VALLEY BOARD OF REALTORS

Mr. JULIEN. Thank you, Senator.

I have handed in my written testimony to you. I also have included in that testimony certain statistics that Senator Chafee was asking about as to population, growth factors and things of this nature.

Basically on behalf of the business community, I'd like to state that if you think it's been a task to keep all of these political entities together, it has been probably a harder task for the business community to agree with all of the different governmental bodies on an issue such as this, but I can assure you that the business community is indeed 100 percent behind this particular project and its implementation.

Our current problem, if we continue and don't do something about it, what we will see is a continuing implementation of laws and ordinances that don't solve the problem but simply create more dissent, not only amongst the business community, but amongst the residents of that community because they do not understand.

If a governmental body cannot even test all of the wells to protect the health and welfare of the community, you can imagine what kind of problems they are having in trying to govern the laws, the rules and the regulations that they are trying to implement in trying to stop a behavior, not solve a problem.

Needless to say, the business community is definitely 100 percent behind working out a solution to the problem. We are talking about approximately, the first phase, $17.60 per person to implement the solution. We are talking approximately $4 per acre to implement the solution.

In the study area there, if you took the white area of the map, the description, the index, and superimposed that on the study area, that's what we're talking about, land mass in private hands, so what you have is a high density of the population in an area that is being impacted heavily, so it is deceiving to look at New Mexico. New Mexico's land masses are only 10 percent in private hands.

Senator DOMENICI. In this area?

Mr. JULIEN. That's correct, in this particular study area, so consequently, what you have is people population growth—for example, Espanola—over 50 percent in the last 10 years.

Senator CHAFEE. Fifty percent growth?

Mr. JULIEN. That is correct. The reason is the infrastructure was there to accommodate the people needs.

Senator DOMENICI. Let me see if I can help here. Senator Chafee, you asked us when we drove in here from Los Alamos what portion of New Mexico is owned by the Federal Government, and we talked about that.

What Carlos is telling us is that if you look at the study area, you have private land, you have United States Federal Government land, and you have Indian land that the Federal Government is trustee over. The latter two are not areas that people can move into under city or county ordinance and build a filling station or a house because the Indian lands are governed by Indian development and the Federal lands—we can't build on BLM and Forest Service.

So the point he is making is—I'm glad you made it because we didn't quite have this pegged right—that the concentration of growth is much more severe and getting more severe all the time than the percent population growth because it's related to a very small area wherein the growth is occurring, not the 500,000 acres.

Mr. JULIEN. That's correct.

Senator DOMENICI. Is that a fair statement?

Mr. JULIEN. Yes.

Senator DOMENICI. I have a question of you. When you say the business community, we have a very large and diverse area. Which business community do you represent?

Mr. JULIEN. I am President of the Espanola Valley Board of Realtors. We are an all-member board, meaning that our membership includes real estate licensees which is your front line to dealing with the public as to real estate matters; bankers—presidents of all of the banks and all of the banks of the particular area of largest growth, which is the Espanola Valley area; appraisers; several different professionals and different professions, all peripheral to the business community.

I have also spoken with several community leader organizations. I have been involved in this since before it was, so consequently, I have been speaking all over the study area on it. My representation addresses the majority of the business leaders and the community, and the study area as it is from Santa Fe north.

I have not spoken with anyone in the Los Alamos area. I believe they are represented here. As to the business community, I don't know, but mainly it is the business community for the northern district that I represent.

Senator DOMENICI. Thank you, very much.

Herman Agoyo, Chairman, All Indian Pueblo Council from San Juan. Herman, I'm glad to be with you.

STATEMENT OF HERMAN AGOYO, CHAIRMAN, ALL INDIAN PUEBLO COUNCIL

Mr. AGOYO. Good morning, Senators.

I am here at the invitation of Governor Jacob Viarrial. I am vitally interested in what is happening here for two reasons: one, I am a member of San Pueblo and as a child roaming the river areas, I had no qualms about drinking the water there whenever I got thirsty, but I don't dare do that now because as you heard, our ground water is getting polluted.

Secondly, I am a member of the Technical Advisory Committee within the City of Albuquerque, which is doing basically the same thing, so I am very interested in the process that is taking place with this particular project so that we can learn from what is happening here.

The only thing that I'd like to say is that the Bureau of Indian Affairs' resources are very limited and I think under the Environmental Protection Agency, and under the Clean Air Act, Indian tribes are being treated as States but we haven't seen any of those dollars under those two programs—at least Indian tribes in this area have not.

I would like to strongly emphasize that those particular legislative efforts be accessed for resources to carry on this particular project and not delve into limited BIA funds for this effort. Whatever funds might be provided by the Bureau of Indian Affairs would be appreciated, but I think we have a bigger resource here, two legislative provisions to help the Indian tribes to be a very important part of this effort.

Thank you very much.

Senator DOMENICI. Thank you, Herman.

Dennis Kirkwood is not here. He represents the Seepage Haulers and it would be good to hear from him. Is he not coming, Governor? Is Dennis Kirkwood not coming?

Governor VIARRIAL. He didn't show.

Senator DOMENICI. All right. Lucy, would you like to proceed and then we will take George?

STATEMENT OF LUCY HILGENDORF, PRESIDENT, WESTERN NETWORK

Ms. HILGENDORF. Yes. Thank you, Senator.

My name is Lucy Hilgendorf. I am a professional mediator and facilitator with Western Network located in Santa Fe, covering the western States. Our specialty is mediating large, environmental, multiparty disputes and also disputes that have some cross-cultural aspects to them.

I have a lot of experience in working with tribes, State, Federal and local agencies trying to improve lines of communication and improve relationships.

Two or three years ago I saw an ad in the local Santa Fe paper which was advertising a public meeting. It said, "There will be a public meeting held in Pojoaque to begin to talk about resolving the water pollution problem." I thought, wow, this is a very tall order.

The whole Pojoaque region had been torn apart for almost 20 years over water rights. I had been following that closely and was very curious to see who would have the nerve to call a meeting like that.

I went to that first public meeting and there was Governor Viarrial, who is far too modest, and he did an absolute masterful job—I speak as a professional mediator and facilitator—at kicking off this entire effort that we are now a part of.

I went as an interested observer and for professional reasons and I became a true follower and believer in this entire project. I want to lend my support to it.

At that meeting, as a matter of fact, somebody in the audience stood up and said, who do you think you are, how can you possibly expect to pull off a multi-party project like this when we have all hated each other for years and years, there's no hope. Governor Viarrial said, we're not going to talk about that, water rights is not going to be talked about in this entire project. We are here to work on a problem we have in common and we're here to get something done.

He has followed through with that, with the committee, in a truly masterful way. I was very pleased to hear you, Senator, speak of this as a model because that is really the point I want to make. I am observing this from a process point of view. I believe this is a unique beginning and could prove to be a very important model to other communities that are made up of various ethnic groups, of different interest groups who share a common problem that has got to be resolved.

Natural resources know no political or ethnic boundaries. The contamination of those resources knows no boundaries, and the solutions to the contamination of those resources, I believe, can know no boundaries as well, but must be the result of a creative, cooperative effort among all those entities.

I want to congratulate the committee on bringing us to this point and lend all the support that I can towards furthering it.

Thank you.

Senator DOMENICI. Thank you very much. Yes, Governor?

Governor VIARRIAL. Mr. Dennis Kirkwood couldn't be here but we have Andy Casias who is also in the same business, hauling the seepage. Also, Senator, Mayor Lucero is here and also Representative Ben Lujan who would like to say a few words when you are finished.

Senator DOMENICI. We will do that.

Thank you very much, Mayor Lucero, for being here. I saw you walk in and if you desire to address us, we will call on you at a later time but thank you very much for being with us and for the role you played in this.

Let me ask you, were you saying in case the Governor no longer had the job, you think he could get a job as a professional mediator?

Ms. HILGENDORF. I feel personally and professionally threatened by this man. This is serious competition.

Senator DOMENICI. For once, we found one of our own could do it without outside professionals, is that right?

Ms. HILGENDORF. That's right. Another reason I went to that first meeting was thinking I might be needed. This is a very touchy, explosive situation and surely they need some professional help like myself. No way, they have done beautifully. It's been a pleasure to watch.

Senator DOMENICI. Do you use that as an example as you teach about this around the country?

Ms. HILGENDORF. Absolutely.

Senator DOMENICI. Let's go now quickly to George from the Pojoaque Valley Schools, Public Services. Let's have him and then we will hear from Mr. Casias.

STATEMENT OF GEORGE GOMEZ, POJOAQUE VALLEY SCHOOLS

Mr. GOMEZ. Thank you, Senator, and good morning. I am representing Pojoaque Valley Schools. Let me say one important thing. I am representing all the youth in this study area.

We are one of two public schools in the study area. The one north of us, Espanola Valley Schools, has a population of approximately 5,200 students. Pojoaque Valley Schools has an approximate population of 1,800 students. These are the people that will be faced with the problems that we are trying to address today.

Pojoaque presently is experiencing a 5 percent growth. However, because of our locale, we have to look at the possibilities of developers moving into the area and we already have seen some. The school system itself is planning on doubling, maybe even tripling, within the next decade.

Senator CHAFEE. Your schools?

Mr. GOMEZ. Yes, sir.

We have presently 20 cesspools in the system. We are in the process of building a brand new high school and we have a wastewater treatment facility there, so because of our problems

just within the schools, we decided to start treating our own sewage so we do have that.

In the older campus, we do have the 20 septic tanks that present a big problem to us. We have seven wells in Pojoaque Valley Schools, two of which are presently polluted and not potable, so we do have a problem that is directly affecting our school system.

I am here to ask for your support in the funding of the Master Wastewater Plan.

Senator DOMENICI. Thank you very much, George.

Mr. GOMEZ. Thank you.

Senator DOMENICI. I understand that Dennis Kirkwood representing the Seepage Haulers could not make it but Mr. Casias is here, would you like to be heard?

Mr. CASIAS. Yes, Honorable Senator, I'd like to be heard on the issue which is very sensitive to us as well as to the public.

Senator DOMENICI. Please.

STATEMENT OF ANDY CASIAS ON BEHALF OF DENNIS KIRKWOOD, REPRESENTING SEEPAGE HAULERS

Mr. CASIAS. First of all, I am one company owner of pumping services dealing with septic tanks. I would like to start, first of all, by acknowledging that I think a tremendous effort has been applied by the multi-governments who are taking part in this master plan. I believe that it is through this coordination of effort by the various governments that something is going to be accomplished.

The problems that we are seeing right now are that, first of all, in looking at the Espanola area, we all know that there is a steady growth that is taking place, people coming in and taking new residences, the expansion of development in the housing area, there is a lot of mobile homes that are coming in—they are being purchased probably on the average of maybe 30 a month.

The old inheritance process that has taken place in many parts of New Mexico, in northern New Mexico it is known that families past down lots of land to their offspring, consequently they settle down near their parents. This is part of the roots that is established under the Spanish family tree. Consequently, you'll find there is a cluster of mobile homes, a cluster of homes, and a cluster of septic tanks.

If we go back to maybe the middle 1960s and you'll find that we had no AID to really come out and give us a hand on designing just how we were going to set up a mobile home with a new septic system in it and then the water wells, and everything else.

I can tell you with all honesty right now that the benefits that are coming about are mostly because a lot of septic tank pumps or pumpers in the area are doing their jobs by removing the substance that is in septic tanks. It is not the septic pumper that is contaminating the environment. It is our own use of septic tanks that is causing this.

We can go out and try to educate the public on the maintenance of the septic tank system, however, I don't know causes the septic tanks to remain uncleaned or whatever—it could be economic—but the fact remains that a neglected septic tank that stays the way it

is without any maintenance whatsoever will eventually commence to pollute the water system in our area. This is a true fact.

We, as pumpers, know that perhaps maybe as little as no more than 5 percent of the people that use septic tank systems are having them cleaned and pumped the way they are supposed to be. The rest, 95 percent, probably are not getting done.

Right now, we are looking at Espanola, for example, with probably a number of 9,000 septic tanks. I would say that is a pretty moderate figure, but they exist out there. They are there, they are all over the place. In some areas you have a 1 acre plot of land and probably there is three or four homes in it and there is two or more septic tanks in the area. This is what is causing the contamination that I can tell you of.

Right now, we need to address an immediate problem and the problem is, of course, disposal of that raw waste that is being removed from septic tanks. There is no place to take it to, absolutely no place.

What really worries me is that if we don't start looking at a fast, immediate response to these problems, septic tank pumpers are eventually going to run out of business, they are going to park their trucks, they're not going to get the job done anymore, and I don't know what is going to happen when the septic tanks start to overflow. Nobody will be around to pump them because the pumpers are taking a risk right now by pumping the septic tanks. Many times they don't have a place to take it to.

There is only one isolated area that is still taking this raw waste and it's in Ojo Caliente, and no where else is there a place for us to dump it. It is a very serious problem.

Senator DOMENICI. Mr. Casias, thank you very much for your testimony.

Let me ask you this. Do you agree that the location for the first phase septage treatment disposal facility, you, as one, who is familiar with the area, agree that we ought to move with that now, and that would be a good first start for this plan? Is that what you're telling us?

Mr. CASIAS. Yes, sir. Yes, sir, I do.

Senator DOMENICI. But you raise another problem, even with that, we have a problem of maintaining the cesspools by the individual owners?

Mr. CASIAS. I believe that we have to commence an educational program where the general population of our communities are well made aware that a septic tank is something that needs to be taken care of, that we cannot continue to neglect the septic tanks like we cannot continue to, in some areas, if you do without changing the oil in your vehicle. It is no different. You will eventually kill that motor. The same thing applies. My simple definition of any system is that it requires, like every system does, maintenance.

Senator DOMENICI. Thank you very much. Senator Chafee.

Senator CHAFEE. Just a question about maintenance of the septic system. I suppose most people figure if the thing works, why bother with it. What do you do to maintain a septic system, can you tell me, and what does it cost an average homeowner?

Mr. CASIAS. A septic tank system requires cleaning, that means pumping. A sludge substance that settles on the bottom of the septic tank definitely has to be removed.

Senator CHAFEE. How often?

Mr. CASIAS. At least every 2 years.

Senator CHAFEE. Every 2 years. What would that cost roughly for an average homeowner?

Mr. CASIAS. Well, you're looking at a cost of, one pumping once every 2 years, roughly between $55 and say $85, depending on what areas you're traveling to.

Senator CHAFEE. That would constitute maintenance?

Mr. CASIAS. That constitutes maintenance, absolutely. It constitutes maintenance.

You have two types of tanks that you are dealing with now. You also have the restaurant grease traps that also are required to be cleaned and pumped well so that the cities will not allow that to get into their water systems. I can see why.

Senator CHAFEE. I've learned something here today. I know to rush home and get my septic system pumped out.

Senator DOMENICI. Where do you have a septic system?

Senator CHAFEE. Well, I've got one at home in Rhode Island.

Senator DOMENICI. I thought Rhode Island was so modern, we didn't have the septic system?

Senator CHAFEE. I live out in the country, and I can hardly wait to get home and get it done properly.

Mr. CASIAS. I'd like to add one more point to the subject and it deals with the material used for construction of septic tanks. From the early 1960s to about 1975, we were still looking at septic tanks that were not really designed to handle the proper process of breaking down solid wastes eventually into liquid. We sometimes refer to it as gray water.

We found out, and we still see them today, these septic tanks were built with plain rock, to hold together with concrete or cement, just a big cover on the top and that was it. There is nothing left in there now, so these tanks are not sealed, and in some areas, we even found some septic tanks that were built just under ground like that with sticks around them and that was it. Just something to get into the ground. You can see there is a tremendous amount of septage going directly into the water system.

Senator DOMENICI. Has that changed, Mr. Casias?

Mr. CASIAS. Yes, definitely. In the last 10 years, I've been in business for about 12, and I've seen a dramatic change in the construction and the use of properly designed septic tanks.

Senator DOMENICI. We will ask the Environmental Improvement Division if they are regularly updating the design requirements for this kind of facility and we will get that on the record also.

Mr. CASIAS. I do think that education is going to be the key to preventing anymore contamination of our water.

Senator DOMENICI. We are going to have to hurry here. We need to take about a 15-minute recess when you are finished and line up the next panel. Do you, Carlos and Herman, have something you want to contribute?

Mr. AGOYO. Senator, very quickly, I just remembered one thing that this problem with septic tanks and any sites to get near some

of the foundations, we have seen many homes that have been evacuated because of the result of overflowing septic tanks.

Senator DOMENICI. Carlos.

Mr. JULIEN. Just a point of clarification, I didn't want to mislead the Senator from Rhode Island. The 10 percent, by the way, of the land masses in private hands, of that 10 percent most of it is unusable because of the fact that it's in a flood dome.

Senator CHAFEE. So you get the population in even a narrower area?

Mr. JULIEN. That's correct, Senator.

Senator DOMENICI. Before we take a 15-minute recess so that both the Senator and I can make a couple of phone calls, we have three additional distinguished guests that I failed to recognize. We have three of the Santa Fe County commissioners here, I believe. Is Linda Grille here? Linda, thank you for being here. Is Nancy Rodriguez here? Nancy, thank you for being here. Raymond Chavez? Raymond, thank you very much.

We are going to take Ben Lujan as soon as we come back for just a couple of minutes and then Mayor Lucero, if you want to be at the table for a couple of minutes with Ben. Then we will take the final panel.

Let's take a 10 minute recess.

[Recess.]

Senator DOMENICI. Ben, do you want to start? You weren't on the agenda but we know that it is very important that we hear from you and that you give your views on the future of this very unusual organization of local units of government. Ben, would you please start?

STATEMENT OF HON. BEN LUJAN, A REPRESENTATIVE IN THE NEW MEXICO STATE LEGISLATURE

Mr. LUJAN. Thanks, Senator. I also want to welcome Senator Chafee to this valley.

Let me give you a little history. I think you heard the original $75,000 that was appropriated from the State for the big study. In essence, this is what produced the report before you. Originally, there was a request for $160,000 from the legislature and the legislature appropriated $75,000. I chaired the committee that appropriated this funding.

At the time, the committee requested a local match, I feel the committee more or less requested the local match to see how serious this group was. Certainly they felt if they could get all these entities to share in the costs, we would find out again, the seriousness of the group and to find out if the consortium would really exist.

I don't have to you tell the rest. I think the proof is in the pudding. It has worked and they have proved that certainly they are a group to be reckoned with, and that they are serious about what they are doing.

Let me also simply say—I am sure you are aware of this—that because of the lack of funding that we have in this State where we are short of funds also, the request that was made this year, there

was some concern the committee, and the request that was made this year, we didn't appropriate any money for this project.

However, the committee did take the request very serious and again, one of the concerns is that the joint policy agreement, or the intergovernmental agreement, should come forth and also the designation of the management entity, the fiscal agent. We wanted to see how that was progressing.

I think that the leg work on the acceptance and designation of the land to be used to locate this needed plant also was a concern. I think the committee is very sympathetic to this project.

Senator, you have stated that we need to diversify in this State to enable us to increase our tax base. I think certainly this project would help to improve the conditions to attract industry to the area and also help economic development. I feel certainly jobs are important and this project certainly would do that.

I think it needs to be said that the communities that are addressed in this report are all bedroom communities, mostly a service bedroom community to the National Laboratory here in Los Alamos. I would also humbly request your favorable consideration of the request before you and I can assure you that if we don't address this matter soon, the problem is not going to get any better. In fact, it will definitely get worse.

Also, I think that I can respectfully assure you that if we can get some Federal monies, that we in the State will cooperate in making sure that we also make some monies available for this project.

Let me just simply tell you that we are appropriating and in this last session, we did appropriate $1 million for the waste management at the Federal level and you are aware, as Senator Chafee pointed out, that is a four to one match to bring into the State.

In this special session that we are going to be called into for Friday, we are also going to try to put in an additional $500,000 again to require that four to one match. The only problem there is that we have hundreds of requests from other communities of this State. That is why we need probably a direct appropriation and we do ask the EID to also look favorable in trying to get some money for this project.

I don't need to point out the fact that we are short of funds. That is why mostly we're coming to special session and we will be requested to vote for a tax which is going to go mostly for educational purposes of this State, but we do want you to know that we have been sympathetic and we have tried to address the needs. We will assure you that if you can come up with the money, we will continue to support this project.

Thank you.

Senator DOMENICI. Thank you very much.

Becky Bustamante from Senator Bingaman's office is here with us. Becky, thank you so much for being here. I appreciate it very much. I am sure Senator Bingaman would have been here, he has a conflicting hearing on the census which is very important. I thank you for being here in his behalf.

We are going to continue to work together on projects like this and see if we can't do our share, as the Representative indicated, so the State can do its share.

Becky, would you like to say a few words?

STATEMENT OF BECKY BUSTAMANTE ON BEHALF OF HON. JEFF BINGAMAN, U.S. SENATOR FROM THE STATE OF NEW MEXICO

Ms. BUSTAMANTE. Thank you, Senator Domenici and Senator Chafee. We really want to thank you for holding the hearing and certainly Senator Bingaman said to tell you that, to the extent that he can help in any way, he is willing to do anything he can. It is a very important project for New Mexico and for the three counties here.

Thank you very much for coming.

Senator DOMENICI. Thank you, Becky.

Do you want to go next?

Mr. SANCHEZ. Yes, I'll go next.

Senator DOMENICI. Please.

STATEMENT OF HON. LOUIS SANCHEZ, A REPRESENTATIVE IN THE NEW MEXICO STATE LEGISLATURE

Mr. SANCHEZ. Thank you, Senator Domenici. Welcome to our end of the country, Senator Chafee.

I am involved with the Solid Waste and Land Use Committee of the State Legislature. All of you, I think, are aware now that the Governor has just signed a very comprehensive land use and waste disposal bill, not exactly what we wanted but it's pretty good. Maybe next year we can amend it a little bit.

Regarding the growth—this is the reason we are here because we are having a problem, the sewage disposal—we have experienced tremendous growth in the last 10 years. I believe it's more than 50 percent, something like 54 percent, at last count. I think the 1990 census is going to show it's probably more than that.

We have limited public lands here. We have a lot of Federal land, State land, lands that are under trusteeship by the fed for the Pueblos and a lot of land grants that are just vacant, so the present land is very limited. I am in the real estate business so I know pretty much what the land problem is in the valley.

Regarding the septage, I love to go out in the country and ride around in a jeep or maybe ride a horse. It's getting to be a problem out there with this illegal dumping of septage. Out on the back roads there is 50,000 acres of BLM land right east of my house and it's beautiful country but everyplace you go somebody has dumped something there. It is illegal but it's being done because there is no other place at this time.

Along the river, a lot of people are settling along the river. The water table is high, especially during the irrigation season which starts in May and ends in September, and the water table rises as much as 1 foot below the surface. Therefore, you're not going to keep any septage down there, it's going to all float. You can see it and in the summer, you can smell it for miles around.

It's getting into the water system, th wells are contaminated. Fortunately we were able to establish a good community water system in the valley and we are okay in that way. However, not every community has that good luck with their water wells.

To keep this brief, I'm going to just ask you for your consideration on this matter. We will gratefully appreciate any help you can give us.

Thank you very kindly.

Senator DOMENICI. Thank you very much, Mr. Representative.

Mr. Mayor, were are delighted to have you. If you would care to address the committee, we'd be delighted to hear from you.

STATEMENT OF HON. RICHARD LUCERO, MAYOR, ESPANOLA, NEW MEXICO

Mayor LUCERO. Senator Domenici and Senator Chafee, first of all, thank you very, very much for following through on a meeting that was way back in 1986 on this organization. We are very proud of the fact that we have 16 different entities working together now for one common purpose and one common solution. This organization will stay together and solve our problems.

Our problems go back for many years, it wasn't something that happened overnight. Actually in 1968 when I became Mayor of the City of Espanola for the first time, we realized that we had a contamination problem. The solution for the contamination problem was very simple, just have the City of Espanola annex you and that will take care of our problem, so the City of Espanola has grown by leaps and bounds.

At this time we have in excess of hundreds of acres that wish to be annexed into the City of Espanola. The petitions before the City Council are incredible. The reason for the desire for annexation is just so the City of Espanola can take care of this sewage problem.

The contamination around the City of Espanola, and in the City of Espanola, was extensive, to the point that children and senior citizens can no longer drink the water. As we campaigned a few days ago in the city election, we learned of the many senior citizens that have been sick from the water that they have been drinking.

We approached the Interstate Streams Commission for a grant of $60,000 which they gave us to study the water problems for this area. We asked the Interstate Streams Commission one question, the question that I've been asking since 1968, once a well is contaminated, how do you clean it? Once the aquifer is contaminated, how do you clean it? Nobody can give me an answer.

The only answer they give me is, it would be much cheaper to create a system that is now being planned for this area by over 150 percent than to try and clean an aquifer, and the aquifer is now contaminated. EID has now sealed three wells of the City of Espanola because of contaminants. The City of Espanola has had to drill three new wells—two new wells at a depth of over 700 feet. We go deeper into the aquifer because the water becomes more extensive.

The solution is not to drill deeper wells, the solution is to try and solve the problem of contamination. That, we must continue to fight for. In 1984, the City of Espanola built its new treatment facility. At that time, in 1984, that treatment plant was supposed to take care of the needs of the City of Espanola to the year 2005.

At this date and, as a matter of fact, as early as 1988, the treatment plant was at total capacity. It only lasted 4 years. It was supposed to take care of a 20-year problem.

At this time, the City of Espanola has applied for a loan from EID for $3.5 million and the City of Espanola will enlarge that treatment plant within the guidelines set forth by this organization. We will work very, very closely with the organization and meet those guidelines as set forth in this plan. We are willing to do anything and everything necessary to make sure that this plan is carried out, but the City of Espanola cannot carry the burden by itself.

The areas north of Espanola and the contaminants it has in its water are flowing down toward Espanola and that's what is causing the contaminants in our water. My fear is those contaminants are flowing downhill also to meet the other areas south of Espanola. I think the problem is beyond grievous at this time because this was grievous in 1968 and now it's at the point of how do we clean an aquifer, how do we clean a well that's been contaminated?

I could go into many, many details, and many have been explained here today but I want to say thank you very, very much for being here, for listening and being concerned about a tremendous problem.

Senator DOMENICI. Thank you very much, Mayor. Senator Chafee, did you have any questions?

Senator CHAFEE. I just want to make a couple of comments.

I think these witnesses have been very, very good. I was listening to Representative Lujan saying that he believes strongly that local matching is required in order to show the seriousness that the locals are prepared to commit themselves to help out. Indeed, we are trying to do that on the Federal level.

Once upon a time, all you had to do was request an engineering study of something and you'd have it. We realized that nothing would come of these engineering studies because it would end up with the State or local community having to put in a lot of money, but they didn't have to pay anything for the engineering study, so they were glad for the study and it kept the angry citizens at bay for a while while the problem was studied.

We changed that. Now we make the State and the local communities contribute to the studies and there are a lot less requests for the studies. They have to help pay for it.

Secondly, I just want to say I don't think there is an area where an ounce of prevention is worth a pound of cure more than in environmental matters. As you said, Mayor, how do you clean up an aquifer when it's polluted? It's terribly expensive and very difficult, particularly when you're dealing with toxic wastes or any kind of waste.

Thirdly, I think the problem of illegal dumping is a serious one as you mentioned, Representative, when you go out in the country. One of the governors was mentioning to me that here you've got 500,000 acres and unless you have an approved place where the septic people can dump, they are liable to cut corners—I'm not suggesting the man who testified here was in that group—but we all know how human nature is and if they have to truck this stuff many, many miles, they are liable to dump it. At least we find that in Rhode Island. Maybe that doesn't occur in New Mexico, but I would be willing to bet a little bit of it is true anyway.

Therefore, it isn't enough to say well, the septic people can pump and dump it in an approved place because they won't, in many instances if the approved place is too far away.

I'd like to ask a question. This is clearly unique in that you've brought 16 entities together, and that is a remarkable feat. It is wonderful that has been achieved, but my question is, how many areas—I've asked the Representatives who have kind of a statewide view, although you come from local areas—do you think there are many so-called rural areas in New Mexico that have exactly the requirements that these two valleys have that we are discussing here today?

In other words, if we solve this problem are we going to go next door and find the same thing is over there somewhere?

Mr. LUJAN. I don't think so, Senator Chafee. I think that this consortium of communities is unique.

Senator CHAFEE. I recognize that the consortium is unique but is the problem unique?

Mr. LUJAN. I believe the problem also is unique. The other communities throughout the State don't have, I don't think, the checkerboard type communities that we have here of Indian/Federal lands in the area that we are talking about.

We have communities that almost is all private land, maybe with a little bit of BLM land, that have a problem in wastewater, however, they are small communities, individual small communities, and they don't have the flow. We have a different type of flow here that almost flows directly into one area. I think that is what is hurting our aquifers more than any other area.

Senator DOMENICI. Yes, Representative Sanchez?

Mr. SANCHEZ. Senator, being a member of the Land Use and Solid Waste Committee, we traveled all over the State last summer and we found many communities, especially along the river that are having the same problems that we are.

Senator CHAFEE. I must say it was discouraging to hear from the Mayor that just a few years ago, you built a waste treatment plant that was meant to last you to 2005. When you built it, I suppose that was 20 years away and 4 years later you're at top capacity. Did somebody make a grievous error in underestimating or was this rapid population growth unexpected? What took place?

Mayor LUCERO. What happens is many areas wanted annexation to solve the problem. Since the city did have the capacity in its treatment plant to be able to take care of the problem, we annexed those problems into the city to be able to treat the liquid wastes. Therefore, the annexation is what made the difference.

Senator DOMENICI. What you mean is added population by annexation?

Mayor LUCERO. Added population by annexation.

Senator CHAFEE. I see.

Mayor LUCERO. If we would have remained the same size, we would have been okay, but we had to take care of our neighbors. If we were to annex what is before the city council today, we need a treatment plant twice its size.

Senator CHAFEE. Your population is very patient to accept all this being willing to annex everybody.

Mayor LUCERO. I feel that we are good neighbors.

Senator DOMENICI. I don't think there is as big a disparity between Espanola and the rural areas as there might be in some of the others. We have a much more severe problem, for instance, in the City of Albuquerque, as both Representatives know even though they are not from there. We have the third largest population in the State living in an unincorporated part of Albuquerque and we can't get this kind of relationship.

Senator CHAFEE. You mean Albuquerque won't annex them?

Senator DOMENICI. No. They don't want to be annexed. The cost of the whole system is very high in Albuquerque. You claim general obligation bonds for sewer or water, for streets, and you've got to carry it out to an area that just needs water and sewer for now and is somewhat rural, so they can't see the benefits flowing from the increased ad valorem taxes, and a few other things. It's difficult. Albuquerque is struggling much more than other cities on annexation.

Mayor LUCERO. One of the big problems with this in Albuquerque, as we have found out in Espanola also, is that we don't know where it's going to percolate to. The south valley is very contaminated in Albuquerque, but that contamination is now percolating into its well system as it did in Espanola and it's doing in Espanola. That's why we've had to close wells in Espanola.

Senator CHAFEE. Where do you get your drinking water? Is it from the aquifer and these deep wells?

Mayor LUCERO. Yes, Senator. All of our water comes from the wells.

Senator DOMENICI. Santa Fe gets some from the lake. Albuquerque is thought to be sitting on a huge aquifer and it's all extremely deep wells, much deeper than they are speaking of here, but all of Albuquerque is huge water wells and an aquifer underground. The Mayor is right, it's clean now but there is some seepage and some very serious problems of contamination.

Mayor LUCERO. Santa Fe has wells here at Buckman on the Rio Grande Basin but we are within 10 miles of that field. When this contamination gets to that point, the Santa Fe will be in serious problems. We tried to get the City of Santa Fe into this organization back in 1986. The City of Santa Fe said, it's not our water system, it belongs to the Public Service Company of New Mexico, they are the ones that should join you.

The City of Santa Fe is liable to have problems in the future if we don't solve our problem of contamination.

Senator CHAFEE. Did you say you were Mayor in 1968?

Mayor LUCERO. Yes, Senator.

Senator CHAFEE. You must have been a boy Mayor.

Senator DOMENICI. He was and then he got out of politics and he came back as an old man.

Now he's really getting old. He asked for more. He just got reelected, so the next time you come, Senator, he'll probably be gray-haired.

Thank you all very much.

Next we have our third panel. We have about 35 minutes for this next panel and we are pretty close to being on time. Is Mr. Little from the Bureau of Indian Affairs here? Terry Christensen, Indian Health Service? Richard Mitzelfelt, New Mexico Environmental

Improvement Division—and you brought some of your staff with you, is that right?

Mr. MITZELFELT. That's right.

Senator DOMENICI. As they are needed, you can identify them. Do we have Charlie Nylander from Los Alamos? Do we have Ken Kirkpatrick from the EPA. Ken, you're the Federal Government's EPA, right? Where are you headquartered?

Mr. KIRKPATRICK. In Dallas, Texas.

Senator DOMENICI. What is your title?

Mr. KIRKPATRICK. Deputy Director, Water Management Division.

Senator DOMENICI. Thank you very much. Senator, shall we just proceed as they were listed?

Senator CHAFEE. Sure.

Senator DOMENICI. Let's go with Joe Little first of the Bureau of Indian Affairs.

STATEMENT OF JOE LITTLE, DEPUTY DIRECTOR, WATER MANAGEMENT DIVISION, BUREAU OF INDIAN AFFAIRS

Mr. LITTLE. Thank you, Senator. First of all, I'd like to extend my apologies for my Area Director, Mr. Mills, who was going to be here to testify but had to be out of town on business, so I am covering for him.

I am the Vice Protection Manager for the Area Office which deals with all the water issues among the tribal groups. We are generally more in a defensive posture than we are in trying to implement some of these programs.

Be that as it may, we have submitted a statement to you. It is relatively short and I will just attempt to paraphrase it for time's sake.

Basically, the Bureau of Indian Affairs has been involved with this program since its initiation, not that we were directly involved but mainly through the nice efforts of Governor Viarrial, who I might commend at this point for bringing this whole thing together, and through his request for our assistance, we have helped out in the past.

We have provided the $30,000 last year, as Governor Viarrial indicated, to the Pueblos, to provide input into the initial study. Mr. Viarrial, in his own inimitable way, approached the Deputy Assistant Secretary for Trust and Economic Development the last time we were in the area and asked for additional support monies for the second phase of this study.

I would like to report to the committee that we have gotten permission from the Central Office in D.C. to provide half of that $35,000 he has requested. We are hoping that IHS will be able to join us on the other portion, therefore insuring that there will be enough money to cover the services.

We would only like to indicate that we are in total support of the tribe's efforts in this area, knowing it is a very difficult arrangement working with the various jurisdictions in this area. We also support the idea of developing a joint powers agreement through the State to accommodate this problem.

We will continue to provide technical support when needed and when called on by the tribe. We have done that in the past through

our hydrologists within our office and we will continue to do that in any way possible.

Thank you.

Senator DOMENICI. Thank you very much, Joe.

Terry of the Indian Health Service.

STATEMENT OF TERRY CHRISTENSEN, DIRECTOR, DIVISION OF SANITATION FACILITIES CONSTRUCTION, INDIAN HEALTH SERVICE

Mr. CHRISTENSEN. Senators, I am pleased to be here today representing Area Director Woconda who couldn't be with us. She has had recent surgery and is recovering from that.

My name is Terry Christensen and I am the Director of the Division of Sanitation Facilities Construction, Office of Environmental Health and Engineering of the Albuquerque Area Indian Health Service.

At this time, I'd just like to take the opportunity to comment on the need for the solutions to the groundwater contamination problem in the Espanola and Pojoaque Valleys. I think it is appropriate that we commend Governor Viarrial and the Steering Committee for the efforts that they have made in this Master Plan document.

As a health agency, and particular concerned about the health of the Indian people, we feel it is very important that we address the issue of the groundwater contamination since it directly impacts the health of the Indian Pueblos.

The Indiana Health Service has, in the past and continues to have, the authority to provide sanitation facilities for the Indian Pueblos. We have constructed water and sewer facilities for all of the Pueblos within the wastewater study area.

Senator DOMENICI. Would you make that statement one more time?

Mr. CHRISTENSEN. The Indian Health Service has constructed community water and sewer facilities for all of the Pueblos within the study area. We feel through those efforts those facilities have had a dramatic effect in the improvement of the health of the Indian people in this area.

Senator DOMENICI. May I stop you there?

Mr. CHRISTENSEN. Yes.

Senator DOMENICI. In the preparation of this plan, I assume those existing facilities have been noted and inventoried as part of the infrastructure of the region?

Mr. CHRISTENSEN. That's correct.

Senator DOMENICI. Do you happen to know whether, first, the capacity and then the condition of those facilities are determined to be adequate, inadequate, do they have more capacity than currently being used?

Mr. CHRISTENSEN. That depends upon the particular reservation. Each reservation is distinct and we do have at least reservations currently that the facilities are less than would address the need. Those are addressed in the Governor's document.

We do have two of those facilities which are being upgraded through current projects funded by the Indian Health Service. At least one of those is to be constructed this year. The other one is a

cooperative venture between the Indian Health Service, EPA, the Department of Housing and Urban Development, and the State EID Office, under the EPA construction grants program. That also is to be constructed this year.

Senator DOMENICI. I assume that has been noted by the engineers. You are aware of this additional capacity and updating that is occurring and it's taken into consideration in your recommendation?

Mr. LITTLE. Yes, it is.

Mr. CHRISTENSEN. It merely addresses the need that is there now.

Senator DOMENICI. Go ahead, sir.

Mr. CHRISTENSEN. As a result of these facilities that have been constructed on the Indian reservations, we don't see the dense concentration of septic tank and drainfields which exists in some of the other areas. As a result, we are not seeing the contamination problems as they exist in some of the non-Indian areas.

However, there is, and it seems to be pointed out by the study, that the movement of groundwater has no regard for reservation boundaries and we see a definite movement there into the reservation areas.

As was indicated, the sewage facilities on the Indian reservations utilize the lagoon system. While these lagoons have been designed and constructed to previously acceptable engineering standards, some of the older lagoons are unlined and therefore, may be considered as potential sources of groundwater contamination.

Total retention lagoons where no seepage is allowed may be impractical in many cases due to lack of sufficient land area. Mechanical sewage treatment plants generally prove too costly for operation by a small community such as the Indian Pueblos where the total population and economic base is small. Therefore, the regional treatment plant which will serve the larger population and economic base to support the expense of operation and maintenance costs are options which need to be considered.

The construction and operation of such community systems have the potential to reverse the current trend of the increased groundwater contamination threatening both the Indian and non-Indian drinking water supply in the region.

The Indian Health Service supports, where economically feasible, the concept of the community sewage facilities and the general concepts of the wastewater management plant. Any new water or wastewater facilities or upgrades constructed by the Indian Health Service on Pueblo lands will proceed with due consideration of the regional master plan and with future anticipated connection to the regional wastewater system.

The Indian Health Service supports the concept of the regional treatment facility as proposed in the master plan and believes they are needed to protect the precious groundwater resource and to reverse the severe groundwater contamination problem in the Espanola and Pojoaque Valleys.

These facilities will also provide protection for the long-range health and well-being of not only the Indian population, but all residents of the region.

Senator DOMENICI. Thank you very much.

Let's go to Richard now from the New Mexico Environmental Improvement Division.

STATEMENT OF RICHARD MITZELFELT, DIRECTOR, NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION, ACCOMPANIED BY GERALD SILVA, DAVID BAKER, AND DAVID HANNA

Mr. MITZELFELT. Senators Domenici and Chafee, my name is Richard Mitzelfelt. I am the Director of the New Mexico Environmental Improvement Division. Today, I am here to testify about ground water contamination affecting the Espanola and Pojoaque Valleys.

With me are EID specialists to address technical and specific questions. I have Gerald Silva on local issues; Dave Baker on ground water issues; and Dave Hanna on construction and loan issues.

Mr. Chairman, the environmental problems facing residents of the Espanola Valley and Pojoaque Valleys of New Mexico stem from several sources. The most serious and central issue is the accelerating degradation of the ground water supplies.

Local ground water is used both as a drinking water source and a sewage disposal facility. Given that the amount of ground water is finite, the two uses work against each other.

In the past, human and animal wastes have had little impact on the local ground water quality. This was due to the low population density and the extensive irrigation farming system necessary to support the population. The impact of human habitation is now polluting the ground water supplies necessary to support the people.

The pressure of human development has already exceeded the ability of the environment to assimilate the amount of septage tank effluent being discharged into the ground. Loading from sewage contributes to the further degrading of the local ground water in several ways. We have odor problems, space problems, iron, manganese, and hydrogen sulfide, as well as the nitrogen and nitrate problems already mentioned here today.

In my testimony, I've gone into the health effects but in the interest of time, that is provided in written testimony, and I will skip over that.

Organic solvents are another problem that go along with septic tanks. Septic tank degreasing products are used—substances like drain and toilet cleaners, bleach and liquid cleaners are commonly flushed into private septic tank systems and can easily reach groundwater.

Septic tank effluent is a source for pathogenic bacteria and viruses. Microbial contamination of groundwater supplies has caused outbreaks of shigellosis, typhoid fever, gastroenteritis, the blue baby syndrome, viral hepatitis, and other things we can mention. The potential for similar health problems does exist in New Mexico and has the potential here in these valleys.

The Espanola Valley and Pojoaque Valley Wastewater Master Plan was developed in an attempt to come to grips with the degradation of local groundwater supplies. Multiple political entities

were involved. The Espanola and Pojoaque Valleys Water and Wastewater Steering Committee is a united front formed to address the problem of environmental degradation.

The fact that so many independent political entities, each with their own agenda and priorities, have come to realize the magnitude of the problems facing us all as New Mexican is heartening to us. Environmental pollution knows no boundary. This has already been mentioned. We are all in this together and any solution must reflect this reality. The groundwater supply must be protected by mutual efforts.

However, unfortunately, the financial resources are no longer available solely at the State level to properly address the problem. We are here today to support the case for funding of the Espanola Valley and Pojoaque Valley Wastewater Master Plan. The investment of Federal monies now will allow us to act on water and wastewater problems that face us all.

It is far-sighted both politically and environmentally, and may well prove to be a model for confronting similar river valley problems in New Mexico and the rest of the country. We are committed to cooperating with the local communities and the Federal Government to arrive at a successful resolution of the problem facing us in the Espanola and Pojoaque Valleys.

Mr. Chairman, thank you for the opportunity to provide testimony. Thank you for providing this hearing so that local input can be given. If the New Mexico Environmental Improvement Division can be of any further assistance in your hearing process, please do not hesitate to call on us.

Thank you.

Senator DOMENICI. Thank you very much. We are going to get back to you, I'm sure, and also to Mr. Baker and Mr. Silva.

How about Los Alamos? Mr. Nylander, let me say before you testify that people in this valley that have been working on this project have been singing the praises of Los Alamos as technical assistance partners in this project.

In fact, when you do a lot of things like this, they go unsung and unnoticed, and we're not going to let that happen today. We want you to tell us what you have been doing. I believe those who have been working on this project will give their own testimony that you have been absolutely tremendous in giving technical assistance as a citizen, the lab as a citizen, not for hire, and we really thank you for it.

We'd like your evaluation and ideas of what's been going on and what the lab is doing.

STATEMEMENT OF CHARLIE NYLANDER, LOS ALAMOS NATIONAL LABORATORY

Mr. NYLANDER. Thank you, Senator Domenici. It is a privilege to be here representing the Laboratory support for this very important project. As you know, the Laboratory has enthusiastically supported the master plan and it's primarily because most of our employees, or a good many of them, live here in the valley areas. Employees of contractors and subcontractors reside here as well. So we are concerned about their health and well-being.

Also, we are a neighbor. We are a neighbor that shares the common upper Rio Grande watershed, so we are concerned about the environmental impacts in our surrounding areas.

The Laboratory was invited to serve on the Steering Committee to provide technical assistance, and that is what we have done. We have helped to developed the scope of work, a request for proposals to hire a contractor and review the contractor's work.

We also helped in the publication and printing of the master plan itself and we're undertaking the preparation of a video tape, a film that will actually depict some of the water quality problems in the region and some of the proposed recommendations in this study and try to bring out in some kind of very palatable way some of these problems so that we can gather more and more local as well as political support.

I think the real strength in this master plan is that each individual community was investigated separately. They were looked at for their individual pollution problem, their very specific environmental considerations in that area, and the solutions were all developed very specific to those communities.

However, each one of those solutions is designed such that eventually some time in the future, they can all be tied together and you can have, in essence, an areawide wastewater pollution project.

It's been a real privilege to serve on this Steering Committee and the Laboratory continues and will continue to support this project. I think the membership and the chairmanship of this committee has been very unique.

As a native Santa Feian and resident of New Mexico, this is a first in my lifetime, my experience, and I can say that until today, I could almost say tongue and cheek, politics have never really entered into this project. We have always had political oversight, we felt the political support, but this hasn't been a political body.

This membership of 17 or 18 individual organizations has worked shoulder to shoulder in a very nonpolitical way. I do believe that—I feel positive they can form joint powers agreements and do the necessary organization to implement this plan.

I appreciate your support and thank you for this opportunity.

Senator DOMENICI. Thank you.

Mr. Kirkpatrick from the U.S. Environmental Protection Agency.

STATEMENT OF KENTON KIRKPATRICK, DEPUTY DIRECTOR, WATER MANAGEMENT DIVISION, U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VI

Mr. KIRKPATRICK. Good morning, Senator Domenici and Senator Chafee, and thank you for this opportunity for EPA to be here today and to testify.

On behalf of our Regional Administrator, Mr. Bob Layton, we do appreciate the chance to come out and talk about ground water because we know it is a tremendous and valuable resource to the State of New Mexico with something like 90 percent of its population depending on ground water for drinking water. That is higher than any of our other four States—Texas, Louisiana, Arkansas and Oklahoma. So there is a high level of interest on the part of EPA

in protecting and cleaning up problems of ground water contamination in New Mexico.

I might say just on a personal basis that I have had the privilege of working in New Mexico many times as far back as 1962 when, as a young Public Health Service commissioned officer, like Terry down the line here, when the Water Pollution Program was in the Public Health Service at that time, I was assigned to the New Mexico Health Department to work on some water pollution problems in New Mexico. I have had a good long experience working with the State and it has been nice to do that.

Senator DOMENICI. You're not saying Terry is extremely young, are you?

Mr. KIRKPATRICK. Terry and I both are still young.

I am also mindful, Senator, of the sign I remember seeing years ago on the wall in a restaurant in Santa Fe that says, "We don't care what they do in Texas," so I am certainly not out here to say, well, in Texas we do it this way.

Senator DOMENICI. We are delighted.

Mr. KIRKPATRICK. I knew you would be.

My statement has a lot of detail and in fact, reiterates some of the points that have previously been made by a number of the panelists on the problems and we certainly are keenly aware of the need for the cleanup and the need for the wastewater system that is being talked about and proposed.

I too would compliment Governor Viarrial on his efforts in pulling this group together and getting to this point in this clean-up effort.

The statement that I have submitted talks about a lot of the EPA programs that you all have given to us on a nationwide basis to operate in conjunction with the States, including the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Ground Storage Act, Superfund, all of which certainly deal with ground water issues in one way or another.

Of course, as you know, the laws provide for EPA to delegate to the State primary responsibility if the State wants to take on the program and operate the various programs at the State level as opposed to at the Federal level. We have delegated to New Mexico a number of programs over the past year.

If I may concentrate on the Safe Drinking/Clean Water Act and two or three things that are going on that relate to this project in particular. I wanted to mention in particular a couple of things under the Safe Drinking Water Act.

As I mentioned, we've delegated to the New Mexico Environmental Improvement Division, back in 1978, the responsibility to run the Public Water Supply Program. They have done that and they have done a good job over the years.

Under the law, the State does not run the Indian program. It is a separate governmental entity; we recognize Indian tribes and Pueblos as separate States, and none of the tribes in New Mexico have applied to us for primacy under the Safe Drinking Water Act.

Senator DOMENICI. I didn't hear the last statement.

Mr. KIRKPATRICK. None of the tribes or Pueblos in New Mexico have applied to us and EPA for primacy, primary responsibility to

run the Public Water Supply Program under the Safe Drinking Water Act.

What we have been doing is we've worked very closely with the tribes and Pueblos in New Mexico and have provided training and, in fact, I want to thank Mayor Lucero of the City of Espanola who we have contracted with over the past 3 or 4 years for $25,000 for his lab, his waste water lab, to run samples that the Indians collect on the Pueblos for drinking water.

The lab is certified by the State of New Mexico and funded by us, so we have a good three-partner cooperative effort on making sure that the public water supplies of the Pueblos are safe.

We've also recently run some volatile organic chemicals of the Indian wells up in this area and I am pleased to report that none of those has been any problem. Mayor Lucero mentioned they had a couple of wells contaminated with some organics and we are aware of that and they have taken action on those.

A couple of other things, if I may mention them, we have funded—the Congress appropriated money to EPA and as you mentioned earlier it has gone to the States—for wastewater treatment grants over the years and there have been some funds up in the four county area for a number of projects. Espanola and Santa Fe primarily is where most of the funds and projects have been.

Terry Christensen mentioned the grant to Pojoaque and that is a State-funded EPA original grant through the State EID for the Pojoaque Waste Treatment Plant.

I might say that New Mexico has been very quick to react to Title 6 of the Clean Water Act. Of course that is the provision for EPA to get out of the grant-making business and go to a State revolving fund loan program. That program is in place in the State of New Mexico. It is off and running and I believe it was mentioned by someone, I think maybe Mayor Lucero, that the City of Espanola has applied for a loan through that program for some expansion on that plant.

Those monies, I believe, are available. They are loans, they are not grants, for use in the overall plan that is being envisioned up in this area.

We also have, as you well know, the Indian set-aside provision of the Clean Water Act amendments of 1987 where a percentage of the total construction grant money was earmarked for construction of wastewater treatment facilities for Indians, tribes and Pueblos across the country.

We are pleased to note that at least four of our tribes in Region 6 qualify—they go through a ranking system similar to what the State has used in the past for priority ranking. One of the first funded was the Isleta Pueblo. I realize that is out of this area but I want to make the point. Isleta Pueblo was funded, Zuni Pueblo has been funded, and we have a small Kickapoo tribe in Texas and Cheyenne-Arapaho in Oklahoma.

The second round of funding—of course there was only $23 million setaside total through this year of those grants funds—$18 million has been awarded so there is $5 million left. Our headquarters office has sent out a letter dated January 25th to all tribes who applied the first time and all others who may want to apply on the second round of funding, that requires a response by May 1, 1990

on their interest in applying for funds under the Indian setaside, so we have a very short time frame.

It occurred to me as I was listening today that I don't see on our priority list anything from this area. I don't know whether it's feasible to get a little piece of that for the Indian part of this project or not, but I think it is worth exploring and we'd be glad to work on that with you.

I might mention one other project that's related here that the State of New Mexico EID has submitted a project and we propose to fund it somewhere around $50,000 under the Underground Injection Control Program for some further analysis in the Espanola area around their ten wells. It is the Wellhead Protection Project to look at what we call the Class 5 kinds of injection systems that might be in there. It might document more needs or problems so we are working with the State, and we'd be pleased to work with this committee in that effort.

Lastly, I'd like to mention that under the Clean Water Act planning grant money under Section 106, we have been working with the eight northern Pueblo Councils, the Pojoaque Pueblo, San Juan and a couple of others out of this immediate area, to provide some of that planning grant money for use in water quality monitoring, and development of water quality standards.

There is a proposal, I think, in the eight northern tribe package for some septic tank design and construction kind of standards and education. We hopefully will award some of that money very soon.

As you probably know, we have to go through a process for determination as a State and we're pushing our lawyers along to get that done, so we expect very soon. It's not a lot of money but it is some. We only have $300,000 in the whole region but most of it will come out here and to those tribes I mentioned.

I'll stop now, sir, and just say we appreciate again the chance to come out and anyway we can help within the capability and resources we have, we'll be glad to do it.

Senator DOMENICI. Thank you very much.

Senator Chafee, I will proceed with a few questions and yield to you.

Let me start with our last witness. Mr. Kirkpatrick, would you describe briefly what is the Indian setaside's general purpose and let's get that on the record so we can talk about it a bit with the leadership of this group.

Mr. KIRKPATRICK. Yes, sir. Under the 1987 amendments to the Clean Water Act, Congress provided for a specific amount—it's up to 3 percent as I recall—of the total appropriated money throughout the Nation for construction grants purposes for Indian projects, Indian projects that qualify, for improving their wastewater treatment systems, so it's like the Construction Grants Program which we have had since 1956. It's 100 percent money, by the way; you don't have to match it. There is no match on it.

It provides money to improve the existing waste treatment systems, to add necessary lines, necessary lift stations and so on. For example, the project that we have underway—Indian Health Service, by the way, is our local consultant engineer on the Isleta Project—I believe it is an expansion of their lagoon system, plus

some other improvements, so we have that program out there and it's being implemented.

First round awards were made and we are getting ready to go through a second round of awards.

Senator DOMENICI. Let me ask, Mr. Kirkpatrick, assuming we are or can be an entity soon enough to apply for what's left in that fund, our group—we're not an entity yet which we are going to talk about before we leave here—without committing yourself, is it possible that for that very first mission, $2.2 million for septage treatment disposal facilities, that if the entire group, including the Indian component, agreed that in spite of there not being a great deal of septage disposal among the Indian people that it is creating an aquifer problem sufficient to want to get on with building those two sites and that there is a proportion of it that represents a benefit to the Indian people, as this whole project enhances water quality together, is it possible that a portion of that would meet the grant test under the setaside?

Mr. KIRKPATRICK. Without committing myself, as I mentioned, I got the idea sitting back there listening that maybe it could be. I don't know but I think it's worth exploring, Senator, and I think we should do that.

Senator DOMENICI. I agree with that.

Mr. KIRKPATRICK. We will be glad to get with the Governor or others immediately because we don't have much time to work on this.

Senator DOMENICI. I assume Indian Health would not, for starters, have any objection to that, would they?

Mr. CHRISTENSEN. No.

Senator DOMENICI. Mr. Kirkpatrick, are there any other programs currently within EPA umbrella programs that come to mind as fitting some aspect or another of this project?

Mr. KIRKPATRICK. Only those planning aspects I mentioned, the soft planning money under section 106. I think I would yield to the State, under the State revolving fund to see because that essentially is a State-run operation. We have some oversight responsibility certainly, but I would yield to Mr. Mitzelfelt or one of his people to see if the State revolving fund could be applied towards this.

Senator DOMENICI. Before we do that, let me ask you two more questions. With reference to trying to minimize water contamination, obviously the Federal Government has some very exciting—the Federal Government thinks they are exciting—rules and regulations and long term programs. Senator Chafee thinks the Clean Water Act is—and I agree with him—a very good Federal law.

The complaint down here is you give us the rules, you don't give us any money. I hear that everywhere. You set standards, and we don't have the money to pay for accomplishing them.

Could I ask, do you expend any money doing simple kind of research like better septic tanks, better manual type preservation and conservation techniques such as that, or is that out of your domain?

Mr. KIRKPATRICK. No. There is a whole new technology area that we have been working on for some time and there are a number of different kinds of things such as on-site disposal systems, there are

various research efforts that have been done, or you look at dual kinds of septic tanks——

Senator DOMENICI. So that is a mission of yours?

Mr. KIRKPATRICK. They are a mission of EPA.

Senator DOMENICI. And we have not become so highfalutin nationally that we don't do something with reference to such things as septic tank systems?

Mr. KIRKPATRICK. I hope not.

Senator DOMENICI. Now we will turn to you. He suggested that you should share with us what might be available for help in implementing this project.

Mr. MITZELFELT. Mr. Chairman, I'm going to ask Dave Hanna to address the last couple of questions that have come up on funding. He is my expert and we'll just go directly to him.

Senator DOMENICI. Let's do that.

Mr. HANNA. Mr. Chairman, we have worked very closely with the committee for the last year or so talking about funding and how we could put together a package because we knew not one source could fund it, for at least the first mission, $2.2 million.

I administer the loan program. The first question I asked the individual members of the Steering Committee was, who will accept the loan, who will take responsibility for that 20-year loan at 5 percent interest, and who do I sue if you don't pay? Obviously we need a consortium, which we've talked about, with the ability to accept responsibility for the repayment and the liability for that repayment.

We have, as folks mentioned, implemented this loan program under the Clean Water Act very, very quickly. We've loaned out all of our money up to 1990. I hope my boss signs a loan next month for the balance of the fiscal year 1990 appropriation to New Mexico, including the State match. We are also negotiating loans for the fiscal year 1991 and fiscal year 1992 Federal money and State match this summer and this fall, so in your Indian negotiations at Congress, please consider us.

Senator CHAFEE. Under the formula, you will get your money. We have been going to $2.4 million; now that's coming down. I think last year it was $1.8 or something like that, but in any event, you'll get your share. It isn't necessary for us to do something special for New Mexico to get its share.

Mr. HANNA. True.

Senator DOMENICI. I think maybe he was saying he hopes we don't cut the national funding or amount that comes out. Is that what you were alluding to?

Mr. HANNA. That's right. This project would certainly be eligible for a loan and we would be very interested in making a loan to the community for it. We would be using 1991 and 1992 money. Does that answer the Senator's question?

Senator DOMENICI. Are there any other EPA funding sources that come through the State that might, because of the special nature of this, if we were to go ahead and make the agreement and have it a pilot program, is there anything else other than what has been discussed that's around?

Mr. HANNA. Senator, I'm not aware of it. I did mention to the committee the HUD CDBG funds could play a role. Obviously they

are in heavy competition for other projects too. We have dealt with packages of funding and we are very willing to do that with the Indian Health Service and EPA.

Senator DOMENICI. Three more questions. Mr. Baker from EPA, the Federal Government sets the standards with reference to clean water and gives us the tools to accept responsibility imposed on the Federal Government to go out and take adequate precautions before a water table is polluted significantly and sufficiently enough to be a health hazard.

In a complex area like this, people want to continue to add septic tanks, and they want to grow, and it's not unexpected but yet there is increased contamination. How do we get to a point where we tell everybody for enough in advance that things are getting bad? Is there a regular process for checking water so we find out these things in advance?

Mr. BAKER. Mr. Chairman and Senator, I work for EID. No, not to my knowledge and most of these problems have been developed by an outreach program from the State where the word water fair came up. We have gone out and asked people to meet us at various locations, bring in their own water samples, and do screening on them. That was how the magnitude of the problem became known to us.

I agree with you that preventive measures are perhaps really the only way to go in the long run, but the competition to deal with problems that exist doesn't leave a lot left over to look for problems that don't exist yet. Our water fair program has been set up as a way to go into areas and see what do we have here, because we have very little water quality data. There are gaping holes in the information that went into this report, not through any oversight, it's just limited resources available and we concentrated on the areas that we had knowledge of, but we are still continuing to look.

I expect this summer in conjunction with Gerald Silva and his office and the central office in Santa Fe, we are hoping to test another thousand wells with any luck.

Senator CHAFEE. Another what?

Mr. BAKER. Another thousand wells over the summer.

Senator CHAFEE. You mean across New Mexico?

Mr. BAKER. Specifically in this area here, but we also will deal with other sections of New Mexico. It's not exclusive to this area, but we can home in on areas that we know that we have problems and we want better knowledge. The Chamita area is perhaps our best example. We have had several water fairs south of there. We kept seeing peoples' names and addresses in Chamita that had high nitrate levels. We went up there specifically to look at that area and the magnitude of the problem became apparent to us.

In terms of prevention, we are trying to get information out to the people because we need, in one sense, to propagandize our viewpoint that we don't want this to continue, but it's a slow, uphill process. It doesn't grab headlines, hey, we're out here preventing groundwater pollution. What grabs headlines is that somebody is injured, somebody is sick because of the groundwater problem. We are aware of it and are trying to devote what resources we can toward this.

Senator DOMENICI. Mr. Kirkpatrick.

Mr. KIRKPATRICK. May I add two things, Senator? Unfortunately under the Safe Drinking Water Act—let me first say, all public water supplies are required to monitor but that's the tap water, so the problem is while we may be seeing some trends such as nitrate, and the gentleman spoke to a problem that they had monitored, you may see some increases in nitrates in a public water supply, but monitoring the tap water is kind of late in some cases. The pollution has already occurred and it's in the system. As Senator Chafee mentioned this morning, these are difficult, complex systems and expensive to clean up, so that's a problem.

I would like to say that under the Safe Drinking Water Act, New Mexico has prepared a wellhead protection plan and program. We have that in our office right now and expect to take action on that by the statutory deadline of next Monday, March 19th.

That plan lays out a process for a systematic evaluation, testing, and that sort of thing, but it's very resource-intensive and I know that all of our States are very limited in what they are going to be able to do under that plan. It's a great idea and a good pollution prevention concept, but it's very expensive.

Mr. MITZELFELT. Mr. Chairman, could I add to this? There are a couple of other things I'd like to mention.

New Mexico does have a ground water discharge plan program which deals with discharges and deals with the present and future problems, but it doesn't go back unless we have the resources, and also we do have a septic tank program, permit program, that does address discharges into the ground which addresses new but not old.

Mr. LITTLE. Senator, I just wanted to add to that as well, we are facing the same dilemma in the Bureau. As we do investigations here and there and maybe in our water litigation areas, we do a lot of water sampling, both groundwater and stream. We are gearing up our office to identify problems but the concern we have had is once we've identified them, then what? The solutions are much more costly than it is to identify them. We are worried about that end of it because we will initiate that aspect of it but we've got no follow-up in terms of how we are going to resolve these situations once we've identified them.

Senator DOMENICI. While I have you there, could I ask you, we have accomplished a lot of unique things in New Mexico in merging jurisdictions. Our veterans hospital is an example for the country because it's Air Force and VA running one facility. One of our Indian hospitals is front and center because they can take non-Indians, not just Indians. The facility needed did not reach maximum utilization and it looked like we had people in the area that needed help. So I want to ask in this area.

Do you think the Bureau would support a joint powers agreement that was real in the area of maintaining clean water, that put the Indian jurisdictions in this area into an actual sharing of facilities and resources under a master plan?

Mr. LITTLE. We would support it, Senator, but you must remember that within the joint powers framework of the State of New Mexico, which was amended when I worked for the State to include tribes—they weren't included before—the joint powers activity and

the jurisdictional questions are pretty much done completely between the tribes and the State. The Bureau is rarely a partner to that at all because basically it's a matter of identifying the jurisdiction and then having the tribe, if you will, decide what they will allow and what they won't.

We can support it but it really is a function between the tribes and the State entities themselves.

Senator DOMENICI. I understand that but, it seems to me, just thinking out loud here with my friend from Rhode Island, that maybe we would get to a point on that $2.2 million where we would have it all funded except say $500,000 and then maybe we'd have to borrow $500,000. It's entirely possible if we had this thing going right that you would look to each unit and say, even though it's not in your backyard, here is a neat, simple plan over the next 20 years, Bureau you put in $5,000 here; Santa Fe, you put in $6,000; Rio Arriba, you put in $8,000 and you'd have the thing finished.

It is going to require the Bureau's ultimate cooperation in backing what the Indian people do and that doesn't always come out that way.

Mr. LITTLE. That's right and if you'll notice because the lines are delineated, in other words, if you notice we can put in money for these studies, and we have done that. When it comes to the actual developing of the facilities, I think that is an IHS area and not necessarily the Bureau area. These have been split up over the years.

Senator DOMENICI. We understand. I don't want you to answer but I hope you're thinking about the same kind of relationship there. This is not going to work unless a facility that's not on somebody's physical property is paid for collectively by everybody and that probably, in the long run, includes literally everybody, not just everyone except our Indian Pueblos, it's probably everybody in some way that's equitable.

Mr. LITTLE. Could I expand on that, Senator? I followed this with much interest because, as you pointed out, it may or may not be a pilot situation. I think it is a pilot in the sense that if something like that does occur, it extends to other areas.

We have had the same discussions in dealing with jail facilities in this area which we are lacking and any number of other areas where we need this kind of joint involvement. We tried all angles, even to having tax bond issues for tribes. They can raise some of the construction money and then support different ways.

It is a long haul. We have done this for 10 years now and we keep running into problems here and there but hopefully we can resolve them, but it does have further impact.

Senator DOMENICI. Thank you very much. Senator Chafee.

Senator CHAFEE. I'd just like to make a couple of comments. It seems to me that when you look at it from the State's point of view, they've got this revolving fund, they've got x million dollars up there that obviously there are a lot of demands on, but the way a revolving fund works, as you know, is that they lend out money and then they've got to collect it at a modest rate of—what did you say, 5 percent? No one can complain about that.

One of the problems here is they don't have any entity that is going to be responsible to pay it back. I think that is the next challenge and that follows up with what Senator Domenici was saying,

if you're going to get the tribes in on it, you've got to have some way of holding them to the commitment, that they are responsible for x percentage, whatever it is, however you all work it out, and I think it makes a very exciting possibility to get the entities together as they have for the plan, but that's the preliminary event. You're getting now to the main event which is getting some construction, getting something done.

I would hope that entity could be formed and of course when people sign up, they make a commitment. They are going to be stuck with this thing for 20 years at 5 percent when they negotiate the loan.

The other point is that I think it's wonderful Mr. Kirkpatrick is here. Maybe the governors and others have spoken to Mr. Kirkpatrick but he's got some suggestions, it seems to me, on how to help particularly with the Indian tribes. Maybe they really don't need it but they can help pitch in.

Finally, I'm getting back to the cesspool pumper, it does seem to me that too bad that with all these septic systems around that one of the things that's contributing to all of this is the people just plain aren't maintaining their systems. For $85 every two years, that's not too bad a deal, I'd say.

I think it's more from lack of knowing the requirement and I never knew it myself. I have a system and I suspect most of the people in the area that have systems haven't been pumped, don't do it because they don't want to spend the $85 every two years, they don't do it because they don't know that it's a good thing to do.

Somehow if the word could get out to the septic tank owners that they'd better get these systems pumped or else they are contributing to a big problem might be helpful.

Senator DOMENICI. Governor, we are about to wrap-up. We'd like to hear from you now. Would you like to contribute here at the end with some ideas before we leave?

Governor VIARRIAL. Yes, Senator. I'd like to address the issue of the management system. In this first recommendation of the $2.2 million, we don't need a management system to build the septage facility. In that $2.2 million, there is money allocated in there to afford legal services to help the different entities to arrive at this joint powers agreement and a management system, so that's part of it. Then hopefully from there we can continue.

Senator DOMENICI. So who would be the applicant for the money, Governor, for the $2.2 million?

Governor VIARRIAL. Whoever would probably act as the fiscal agent, right now we have the City of Espanola that has been in charge of the fiscal issue. I would think if the city is willing, it would be our fiscal agent for that.

Right now we are not an entity and therefore, we can't take on the responsibilities of a loan. It can't go to an individual this time. We want to do it as one entity made up of all these entities. Once we form the management system then we can start being responsible for loans and what have you.

Senator DOMENICI. But Governor, if we are trying to help you with the $2.2 million and others, we'll have a fiscal agent but still

two facilities are going to be physically located someplace and have to be managed and run, and I guess we're asking who does that?

Governor VIARRIAL. Maybe Mr. Glasco can answer. Go ahead.

Mr. GLASCO. It was envisioned that one facility would be in each, Rio Arriba and Santa Fe Counties; they would take the primary responsibility for maintenance at these facilities. The design of them is such that they would actually require very little maintenance.

Senator DOMENICI. So what you are suggesting is this could still be a forerunner or a precursor so that we don't need the management agreement in place for these two because we've got to get them done quickly?

Mr. GLASCO. That's correct. The fiscal agent could be either the City of Espanola, it could be either or both of the two counties. That was primarily the goal for the initial $2.2 million, within that allocation, within the funding for attorneys' fees and whatnot to set up the management entity which would grow and eventually take over the septage facility and operate the wastewater treatment facility.

Mr. LITTLE. Senator, I might point out this isn't that unique. Under the New Mexico Joint Powers Act, you have had even electrical facilities, electrical units set up by different counties.

Senator DOMENICI. Governor, go ahead. You were saying we could proceed with this and you're going to be working on getting the management plan together?

Governor VIARRIAL. Yes. One other comment I wanted to make was that up to last year, the EPA could give out grants, then it turned into the loan program. Because this has a possibility of being a demonstration project, I was hoping that maybe in some way, either through the Congress or somehow the policy-making people could come up with the monies to help us with this project, not only the $2.2 million, but the $4.2 million later on and make this a demonstration project throughout the country on a grant basis.

Basically, that's all I have, Senator. Again, I want to thank you very much for being here. I also ask that when you do close that Calvin Tafoya be allowed to give the closing also, sir.

Senator DOMENICI. We will do that in just a moment. Senator Chafee, did you have any final comments?

Senator CHAFEE. No. I want to thank you, Senator Domenici for your deep interest in this matter and for all your efforts in connection with the people of New Mexico and say what excellent witnesses they've been.

Senator DOMENICI. They've been great. Let me suggest, I frankly have never seen a local leader do a better job in any difficult project than Governor Viarrial did in this project. I'm not saying that singular here, you've heard every single person, whatever they had to say, they said it was incredible, the job that he did. I really compliment you.

I know of your tenacity, your doggedness to get things done and I really urge that we do not let this opportunity to put this together into an entity get away from us. Maybe we can work on the $2.2 million without it and make it be kind of a stimulus for finishing it. I pledge to you I will try.

Even there, you see, somebody's got to go to Santa Fe and Rio Arriba and say, let's put the grant applications together applications, and put it on paper who pays for what and let's look to the Feds for a piece of it under the Indian setaside. That's got to be done, Governor, and you understand that better than I, but we can't let a lot of time pass or this will die. We don't want that to happen. This is long term.

Let me just close by saying for everyone that talks about bringing more and better job opportunity to the young people in this area, there are some who say, no growth. I don't believe you can have new jobs without something new happening.

On the other hand, you can't have new jobs and growth if every time you get ready to add it, somebody can rightfully say, where is the water? The system is polluted already, there is not enough room in the aquifer and that's why Representative Lujan, a realtor who testified and others, have equated this with the future.

If you want the status quo and you want to lose population and go back, you probably don't need anything. You can have a septic tank clean up program and maybe we'll get by for 15 years, but if you want to add things, obviously you've got to fix this problem. It's a small piece of land versus the area. That is why it is getting more concentrated in terms of pollution. Even though it's a huge area, I'm sure when you first heard that, you couldn't imagine how 500,000 acres could be polluted, but it is possible.

Those are my thoughts, my admonitions and my hopes. We'll try to work with you on it. You work through Ernie and we'll have some people in our offices, and I'm sure Jeff and Bill will help, and EPA, and we will work through the Environmental Protection Agency here in New Mexico. Let's hope that at least by next year, we'll have something concrete and down the line see if we can get it all done.

Governor VIARRIAL. Thank you, Senator, and thank you, Senator Chafee.

Senator DOMENICI. Thank you.

Governor VIARRIAL. Before we all go, can we please stand for the invocation.

Governor TAFOYA. [Closing given in native tongue.]

[Whereupon, at 11:00 a.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

TESTIMONY OF GOVERNOR JACOB VIARRIAL, POJOAQUE PUEBLO

BEFORE THE

U.S. SENATE ENVIRONMENT AND PUBLIC WORKS SUBCOMMITTEE

MARCH, 14, 1990

POJOAQUE HIGH SCHOOL, POJOAQUE PUEBLO, NEW MEXICO

I would like to begin my testimony with a brief word about how the Espanola and Pojoaque Valley Water and Wastewater Steering Committee came to be in existence. The Espanola and Pojoaque Valleys have seen tremendous growth during the last 20 years or so. This growth is rapidly transforming the area from the sparsely populated, rural place it once was, into a series of larger communities. With this growth has come many of the attendant problems of living in a large community. Pojoaque Pueblo was recently successful, thanks in a very large measure to the efforts of Senators Domenici and Bingaman, and Congressman Bill Richardson, in obtaining money to address one of those problems, that of law enforcement within the Pueblo of Pojoaque. Now we are facing a second problem that unfortunately has come with growth, that of pollution of our environment.

In early 1988 I was approached by representatives of Senators Domenici and Bingaman, and also by Congressman Bill Richardson, to serve on a steering committee of local government entities which would be studying the growing problem of pollution of our groundwater. Although I was aware that such problems were developing, I had not realized the problem's scope, nor did I appreciate the interrelationship between the Espanola and Pojoaque Valley areas. Mayor Richard Lucero of Espanola had been actively involved in trying to get such a committee formed for some time, and he also encouraged my participation. In the interest of minimizing potential problems with area politics, and maximizing participation of all of the governmental entities in the area, Indian as well as non-Indian, I was asked to chair the committee. I accepted that role, and it is primarily in that capacity that I offer this testimony today. My testimony, however, should also be considered to reflect the views of the Pueblo of Pojoaque, of which I am Governor.

In 1988 the New Mexico State Legislature appropriated $75,000 for a study of the wastewater treatment needs of the Espanola and Pojoaque Valleys; the Bureau of Indian Affairs provided a match of $30,000 as the contribution for the six Indian Pueblos (Tesuque, Nambe, Pojoaque, San Ildefonso, Santa Clara, and San Juan) in the study area. Contributions by individual counties, the City of Espanola, and the various other non-Indian entities in the committee made up another $10,000, for a total of $115,000. It is worth noting here that every local governmental entity within our planning area is an active, participating member of the Water and Wastewater Steering Committee. Additionally, our membership includes Los Alamos National Laboratory, the New Mexico Environmental Improvement Division, the U.S. Indian Health Service, the Bureau of Indian Affairs, and other private businesses, and business organizations. To my knowledge, this is the first time that so many Indian and non-Indian governmental organizations have been able to get together to agree on anything, not to mention achieving unanimous participation, such as we have.

Our area is one of the most heavily checkerboarded (with respect to Indian, private, and public land ownership) areas in the United States. This has traditionally caused strained relationships between many of the same entities which are now working together on this committee. I think I correctly speak for the entire Espanola and Pojoaque Valleys when I say that protection of our environment, and particularly our irreplaceable goundwater resource, is among the very top items on everyone's priority list. We are working together now to try and solve our current pollution problems and prevent future ones.

The first order of business for the committee was to select the Engineering firm of Molzen-Corbin & Associates to perform the wastewater study. This work was completed in July 1989 with publication of the Espanola Valley and Pojoaque Valley Wastewater Master Plan. The plan and the specific recommendations contained in it were adopted by a resolution of the Steering Committee. We then presented the Master Plan to each of the Governmental entities represented on the committee and obtained individual resolutions of support. Again, support for the Plan from each of the county commissions, pueblos, school boards, etc., was unanimous. I will not take time to duplicate all of the findings of the report in this testimony, but will instead summarize the Master Plan's findings and recommendations. We would like to enter the complete report as an exhibit to this testimony.

SUMMARY OF FINDINGS AND RECOMMENDATIONS OF THE ESPANOLA VALLEY AND POJOAQUE VALLEY WASTEWATER MASTER PLAN

A. Existing Wastewater Facilities

The lagoons at San Juan, San Ildefonso, and Tesuque Pueblos, are undersized, unlined, obsolete and are very likely contaminating the groundwater in their immediate areas. Also, several areas close by the City of Espanola (Guachupangue, El Llano, and the El Guacho/La Plaza areas) have dense development and no wastewater facilities. Much of the population within the exterior boundaries of all six of the Pueblos within the study area is non-Indian and relies on septic tanks or cesspools.

B. Groundwater Contamination Problems

Data from the New Mexico Environmental Improvement Division collected through its program of water fairs provided the basis for the determination of groundwater quality in the study area. The Wastewater Master Plan contains Figure 3.2, which is a compilation of this data. Basically, the data show a close correlation between dense development on septic tanks and groundwater contamination by nitrates. Those areas with nitrate levels consistenly above safe drinking water standards are found in Chamita, Hernandez, Alcalde, San Jose, El Guacho, El Llano, and Los Luceros north of Espanola. Although nitrate levels were somewhat lower in the upper and lower Pojoaque valley areas, other factors, such as taste, odor, coliforms, and high manganese levels were found in the water in this area. This evidence lead the engineers to believe that soil conditions in this area are such that heavy septic tank contamination is in fact occuring, but just not showing up as high nitrate levels.

The groundwater knows no political boundaries, and no one is safe from this spreading goundwater pollution. The City of Espanola recently had to shut down a 300-ft deep city water well because of nitrate contamination from septic tank effluent. This has ominous implications for all of the wells in the area on which so many people, Indian and non-Indian alike, rely. Put quite simply, development utilizing septic tanks has now reached a level that is slowly polluting our drinking water. This development is continuing, and the pollution will only get worse. The only solution is proper collection and treatment of this wastewater in order to halt and reverse this process.

C. Septage Disposal

There are approximately 15,000 septic tanks in the Espanola and Pojoaque valleys, from Dixon in the north down to Tesuque in the south. These tanks produce approximately 10,000 gallons of septage per day. This material formerly went into county landfills or, in some instances, into private disposal ponds. Recent changes in landfill laws in New Mexico banned disposal of septage in landfills. Dried sludge was also banned from landfills, necessitating the construction of special sludge monofills. The expense to a septage hauler of constructing private septage lagoons adequate for the protection of groundwater weighs against that option. Because of the high strength of septage, most wastewater treatment plants will not accept the material because of the potential for plant upsets. The bottom line is, that in the Espanola and Pojoaque valleys, there is no legal place to dispose of septage. Consequently, 10,000 gallons per day is being illegally dumped in arroyos, acequias, back roads, isolated pieces of property, or wherever the haulers can dispose of the material without getting caught.

The first priority recommendation in the Wastewater Master Plan is for the construction of properly designed and operated septage disposal lagoons. The estimated cost for these facilities is $2.2 million dollars. The facilities would be constructed and operated by the two counties in the study area, under joint powers agreements with the six Indian Pueblos. The agreements are necessary for the pueblos to ensure there are no "safe havens" on pueblo lands where illegal septage operations can exist at an economic advantage over the law-abiding operations.

D. Wastewater Facilities

The ultimate goal recommended by the Master Plan is the consolidation of wastewater treatment in the Espanola Valley into a large treatment plant located approximately in the southern La Mesilla area and in the Pojoaque Valley in a plant located around the confluence of the Pojoaque Creek with the Rio Grande. These goals will not realistically be achieved until 40 or 50 years from now. In the meantime there are immediate wastewater needs that must be met. For this reason, interim recommendations were presented in the Master Plan.

Sewer lines will be the most expensive part of providing wastewater treatment to the areas in need, with the cost of the treatment facilities themselves being much less. Lines are to be placed in the ground with the expectation that eventually they will be connected into a larger network.

Areas in the Espanola Valley to be sewered are the communities of Chamita, Hernandez, Alcalde, Los Luceros, San Juan/La Plaza, and El Llano. Of these communities, individual treatment plants are to be provided for Chamita, Hernandez, and Alcalde/Los Luceros. Treatment will be by small, inexpensive "package-type" wastewater treatment plants which may be easily abandoned after 20 or 30 years. It is anticipated that at that time, the plants will have reached the end of their useful life, will be overloaded, and infill development will have occurred that will facilitate connection of these systems into the City of Espanola. Immediate funding needs for these facilities is $15 million.

San Juan/La Plaza and El Llano are to be connected into the present City of Espanola system, with the lines sized to accommodate further expansion up the valley to include other areas. The present City of Espanola plant can be expanded at its present location to handle approximately 1.6 million gallons of wastewater per day. If the communities of El Llano and San Juan/La Plaza, together with presently occurring in-fill growth in the City, are added into the City system, all of the additional capacity will be utilized. Funding for this construction will be piecemeal as the Espanola system expands.

Construction of sewer lines are also recommended for the upper Pojoaque valley, including the non-Indian communities of Nambe and North Pojoaque. These lines would be sized to eventually accept wastewater from Nambe Pueblo, and from Pojoaque Pueblo, when their lagoons have reached the end of their useful life. Treatment would be through means of a small package wastewater treatment plant, located in the area of Pojoaque High School. When the package plant reaches the end of its useful life, it would be removed, and the lines extended into the lower Pojoaque valley to a new, large, permanent treatment facility. Wastewater could conceivably then be accepted from San Ildefonso Pueblo, and also possibly Tesuque Village and Tesuque Pueblo. Funding needs for the initial sewering of Nambe and North Pojoaque, however, are approximately $5 million.

B. Management Goals

The ultimate goal of the plan is to have one, large wastewater management authority managing wastewater treatment and collection systems for the whole area. The entity would be created as a joint venture of the six Pueblos, the City of Espanola, and the Counties of Rio Arriba and Santa Fe. The authorities of the management entity would be derived through joint powers agreements between the pueblos, the city, and the counties, and would be configured so as to permit whatever degree of participation is in the best interests of each pueblo. The sovereignty of each pueblo would be absolutely guaranteed, and no taxation, zoning, or other such authority on Indian lands would be granted to the management entity. The basic intent in the organization would be to allow for a level of joint decision making and dialogue between Indian and non-Indian people, which is not presently in place. Details of the joint powers agreements have yet to be worked out, but there is a commitment from all of the entities involved in the Steering Committee to produce such an agreement. I have faith that we will succeed, and the result will be a model for cooperation between Indian and non-Indian governments for all of the rest of the nation to emulate.

SUMMARY

The Espanola and Pojoaque Valleys have a long history of habitation. Many of the non-Indian people come from families who have lived on this land for three centuries. The Indian people of this area have lived here several centuries longer than that. The people are tied to this land in a way unique in all of the United States. We cannot simply move away if the land becomes so polluted as to be unsafe for us. The people of the Indian Pueblos have not always lived completely at peace with our non-Indian neighbors, but we have lived together in mutual respect for each other for many centuries. An opportunity presents itself here for us to cooperate together to address pollution problems which threaten the health and welfare of us all, and which could also threaten the way of life we and our ancestors have enjoyed for centuries. In New Mexico water is life, and the degradation of our water will inevitably lead to the degradation of our lives here. We feel that going forward with the recommendations contained in the Wastewater Master Plan is our best opportunity to protect our environment and our heritage.

As chairman of the Espanola and Pojoaque Valleys Water and Wastewater Steering Committee, as Governor of the Pueblo of Pojoaque, and as a man with deep roots in the soil of this land, I urge you to support us in our attempt to protect our land and the groundwater underneath. The amounts of money are large, and our ability to fund this kind of expenditure is limited, so help from the federal government is essential. An Indian/non-Indian-managed pilot project like this would be a valuable model for the rest of the country to follow. We have demonstrated that we have the will; now we urge you to help us provide the way. Thank you very much for allowing me to enter this testimony into the record.

Sincerely,

ESPANOLA AND POJOAQUE VALLEYS WATER AND WASTEWATER STEERING COMMITTEE,

GOVERNOR JACOB VIARRIAL, CHAIRMAN

EIGHT NORTHERN INDIAN PUEBLOS COUNCIL

P.O. Box 969
San Juan Pueblo, New Mexico 87566
(505) 852-4265

U S SENATE SUBCOMMITTTEE HEARING
ESPANOLA VALLEY AND POJOAQUE VALLEY
WATER AND WASTEWATER MASTER PLAN
MARCH 14, 1990

Honorable Senator Domenici, Honorable Senator Chaffee, Honorable Pueblo Governors, Mr. Martinez, Ladies and Gentlemen:

I am Calvin Tafoya, Governor, Santa Clara Pueblo and also presenting this statement as Chairman on behalf of the Eight Northern Indian Pueblos Council.

Mr. Chairman, six of the eight Northern Indian Pueblos will be affected by the outcome of the proposed project; specifically, the Pueblos of San Juan, Santa Clara, San Ildefonso, Nambe, Pojoaque and Tesuque. Historically, all of the Pueblos' identified have participated quite actively, both as members of the Espanola Valley and Pojoaque Valley Water and Wastewater Steering Committee and as members of the technical sub-committee since the inception of the project. Now that the project is gaining momentum, all of the Pueblos involve will

continue with their participation and support on the intent and purpose of the project.

Initiated in 1985 by the New Mexico State Environmental Improvement Division, and involving the City of Espanola, Santa Fe County, and the State, as well as the six southern Tewa pueblos, this study has provided a rare opportunity for those pueblos involved to see how their concerns about water quality are shared with the local governmental agencies who are their neighbors. But in this process, as in the pueblos' other issues involving environmental concerns in dealing with water quality, the intent of the project was to identify options by which all the participating entities would make a cooperative decision on the next step to take in regards to to the outcome of the final report. Although, we as governmental entities do not always agree on matters involving our pueblos and municipalities on many issues, we do all agree that the problem that we are faced with in regards to the " increasing wastewater disposal problems and associated public health and environmental concerns" will certainly get our attention. Water Quality is a primary concern and how we address and correct the problem will impact on our future.

In 1988, the Governors of the Eight Northern Indian Pueblos formally adopted a Resolution authorizing the establishment of a Northern Pueblos Water Resources Management Institute.

From a list of needs, the Institute' Committee arrived at a consensus around three general areas; water quality being the primary and paramount concern. Based on this issue was that water quality posed a major problem within the six Pueblo area; additionally, questions arose not only on the predictable issues of ground water hydrology and chemistry and the difficult engineering questions of wastewater management; but also complex questions of land use controls, planning and zoning. To a large extent these types of regulations have never been applied on Pueblo land. The primary concern of the Pueblos' involvement was the impact the project was going to have on our lands, resources and people. With the recent influx (within the last 10 years) of development occuring adjacent to and within the exterior boundaries of our lands, the six Pueblos opted to develop tribal environmental controls in dealing with this problem. The 1985 Bureau of Indian Affairs, Northern Pueblos Agency population lists the six southern Tewa pueblos

as having a total combined population of 5,948 persons or combined housing units of approximately 1,118 homes and a combined land acreage of 131,753 acres. As we go into the next decade we project an increase in both population and homes by at least 5% excluding both population and homes within the exterior boundaries of our lands.

The consultants have identified some recommendations that we feel will dramatically set the direction of the proposed project. The priority being the development of a "joint powers agreement" or "an alternate agreed upon document" between the Six Southern Tewa Pueblos and the Rio Arriba and Santa Fe Counties. With this agreement, a positive intergovernmental effort can be undertaken to insure an important and effective governance tool between these governmental entities. This must be initiated immediately, allowing the six Pueblos a means to seek appropriate support.

As Governor for the Pueblo of Santa Clara and as Chairman for the Eight Northern Indian Pueblos Council, we support the efforts of the project, therefore we are seeking your support and assistance on this project. Thank you.

SANTA FE COUNTY
BOARD OF COUNTY COMMISSIONERS

RESOLUTION NO. 1989- 67 656743

SANTA FE COUNTY BOARD OF COUNTY COMMISSIONERS
RESOLUTION CONCERNING THE ESTABLISHMENT OF
COUNTY WATER SYSTEMS FOR
SANTA FE COUNTY

WHEREAS, the growth of public and private development within Santa Fe County has begun to place significant new demands upon available water rights and supply systems; and

WHEREAS, growth projected for the near term within this County will create demands for water and sewage service beyond the capacity of any existing systems, particularly in the areas immediately to the South and Southwest of the city limits of Santa Fe;

WHEREAS, the public health, safety and welfare require adequate, reliable and cost-effective water delivery and sewage disposal and treatment systems to ensure a safe and healthy population, a sound environment, and economic development; and

WHEREAS, this County is authorized by state law to construct, finance and operate water and sewage systems, at 72-4-3 and 4-49-1 NMSA 1978; and

WHEREAS, the operation of such systems requires the services of professionals with suitable expertise in running water supply and sewage systems and in water supply and quality management; and

WHEREAS, the importation of surface water supplies is mandated by the Santa Fe County General Plan and the Extraterritorial Comprehensive Plan for Santa Fe;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF SANTA FE COUNTY, THAT the Board of County Commissioners are committed to the establishment of such independent regional water supply and wastewater systems as are required within the Northern and Southern Districts of Santa Fe County. The responsibility of design and construction of the required infrastructure will be borne by the beneficiaries of the improvements, and, it is hereby further

RESOLVED that the regional water and wastewater systems contemplated in this resolution shall perform all services and functions ordinarily performed by such systems, including but not limited to:

(a) providing reliable, adequate and affordable supplies of potable water to developing areas within Santa Fe County from available surface water sources within the region;

(b) providing sewage treatment facilities for the developing areas, as well as such outfall lines back to the Rio Grande River as may be necessary to earn return flow credits;

(c) undertake such monitoring and other programs as may be necessary to preserve and enhance the quality and available supply of drinking water within the region,

and it is further

RESOLVED that, to help ensure the sound and successful development, operation and maintenance of the County's water supply and wastewater systems, that a joint powers agreement should be developed and executed between the County of Santa Fe

656744

Resolution 1989-
Page two
cont.

and the Santa Fe Metropolitan Water Board ("the Water Board"), by the terms of which the Water Board would undertake to provide development, maintenance and operation for and on behalf of the County for the contemplated Santa Fe County regional water systems, and it is further

RESOLVED that the County Manager is hereby authorized to take any and all further steps as are necessary and proper for the expeditious effectuation of this Resolution.

Duly adopted by a vote of -3- in the affirmative and -0- in the negative, with -0- abstentions, at a regular meeting of the Santa Fe County Commission held this 14th day of August, 1989, in Santa Fe County.

NANCY RODRIGUEZ, CHAIRWOMAN

RAYMOND CHAVEZ, COMMISSIONER

LINDA GRILL, COMMISSIONER

ATTEST:

JONA G. ARMIJO, COUNTY CLERK

8-18-89
DATE

APPROVED AS TO LEGAL SUFFICIENCY:

NORMAN OSBORNE,
COUNTY ATTORNEY

DATE

686-009

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the 18 day of Aug A.D. 19 89, at 3:49 o'clock PM m. and was duly recorded in book 656, page 743-744 of the records of Santa Fe County.
Witness my Hand and Seal of Office
Jona G. Armijo
County Clerk, Santa Fe County, N.M.

Deputy

SANTA FE COUNTY
BOARD OF COUNTY COMMISSIONERS

656745

RESOLUTION NO. 1989 68

The following listed factors are pertinent to the future development of Santa Fe County:

Santa Fe County is located in an arid land area.

The popularity and mystique of the region have caused development pressures on resources and environment.

Water is considered a valuable resource worthy of conservation.

Protection of groundwater resources in the Santa Fe Basin is considered or critical importance.

The preservation of a quality of life and unique cultural resources while accommodating quality growth is considered important.

Encouragement of economic expansion compatible with environmental protection is a goal of the County.

A wise use of resources and environment causes the necessity to address alternative solutions.

NOW THEREFORE BE IT RESOLVED that the most economical and cost efficient way to protect the environment, quality of life, cultural resources and encourage economic growth is by the design and construction of a regional water system utilizing after the initial stage of development, San Juan Chama/Rio Grande River Water. Further goals would encourage development of waste water treatment facilities and the ability to return treated water to the Rio Grande.

To these ends the Board of County Commissioners of Santa Fe County endorses and encourages application and approval of the Rural Infrastructure Program funding for this request.

PASSED, APPROVED AND ADOPTED THIS 14 DAY OF AUGUST 1989.

SANTA FE COUNTY

NANCY RODRIGUEZ, BOARD CHAIRWOMAN

ATTEST:

JONA G. ARMIJO, COUNTY CLERK

APPROVED AS TO FORM:
NORMAN OSBORNE

COUNTY ATTORNEY

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO) 686010
I hereby certify that this instrument was filed for record on the 18 day of Aug A.D. 19 89, at 3:56 o'clock PM. and was duly recorded in book 65a page 745 of the records of Santa Fe County.
Witness my Hand and Seal of Office
Jona G. Armijo
County Clerk, Santa Fe County, N.M.
Deputy

COUNTY CLERK
JONA G. ARMIJO
SANTA FE COUNTY NEW MEXICO

SANTA FE COUNTY
BOARD OF COUNTY COMMISSIONERS

664698

RESOLUTION NO. 1989- 87

TO SUPPORT THE
ESPANOLA AND POJOAQUE VALLEY
WASTEWATER MASTER PLAN

WHEREAS: severe wastewater management problems have been identified in the Espanola, Tesuque, and Pojoaque Valleys, and;

WHEREAS: the aforementioned wastewater management problems have given rise to contamination of the areas groundwater resources and have caused and are continuing to cause a threat to the public health and environment in the Espanola, Tesuque and Pojoaque Valleys and adjacent areas, and;

WHEREAS: it is the wish of the citizens of the area to protect their groundwater resources, and to provide a safe environment for their communities, and;

WHEREAS: the citizens and governmental organizations of the area have formed the Espanola and Pojoaque Valley Water and Wastewater Steering Committee and have produced a Wastewater Master Plan which identifies wastewater problem area and recommends solutions to effectively deal with those problems, and;

WHEREAS: the Steering Committee has passed and adopted the attached resolution on July 21, 1989, and;

WHEREAS: it is the wish of the Board of County Commissioners of Santa Fe County to express individual support for the Steering Committee and the Wastewater master Plan;

THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS THAT:

1. The Espanola Valley and Pojoaque Valley Wastewater Master Plan is hereby adopted, and;

2. The County of Santa Fe will endeavor to support the implementation of the recommendations contained therein.

Approved this 14th day of November, 1989.

Board of County Commissioners

692,543

RAYMOND CHAVEZ, CHAIRMAN

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the 15 day of NOV. A.D. 19 89, at 9:33 o'clock A m. and was duly recorded in book 664, page 698 of the records of Santa Fe County.
Witness my Hand and Seal of Office
Jona G. Armijo
County Clerk, Santa Fe County, N.M.
Joyce Medina
Deputy

Attest:

JONA G. ARMIJO, SF COUNTY CLERK

APPROVED AS TO FORM:

Norman Osborne

County Attorney

COUNTY CLERK
JONA G. ARMIJO
SANTA FE COUNTY NEW MEXICO

SANTA FE COUNTY
BOARD OF COUNTY COMMISSIONERS

664699

RESOLUTION NO. 1989-88

TO SUPPORT THE
ESPANOLA AND POJOAQUE VALLEYS
SEPTAGE DISPOSAL FACILITIES CONSTRUCTION

WHEREAS: a severe problem with disposal of septage exists in Santa Fe County, and;

WHEREAS: the lack of suitable disposal facilities in the area is now resulting in illegal dumping of septage, and;

WHEREAS: with a continuing lack of septage disposal facilities, the illegal disposal of septage in the area will worsen, and;

WHEREAS: it is the wish of the members of the Board of County Commissioners of Santa Fe County and adjacent Native American residents of the area to protect their groundwater from contamination, and to provide a safe environment for their communities, and;

WHEREAS: the Espanola Valley and Pojoaque Valley Water and Wastewater Steering Committee is attempting to provide facilities for the safe and environmentally sound treatment and disposal of septage, and;

WHEREAS: the aforementioned Committee, in conjunction with the Counties of Santa Fe and Rio Arriba, is attempting to secure funding for the construction of septage disposal facilities from the New Mexico State Legislature;

THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS ON this 14th day of November, 1989.

Board of County Commissioners

Raymond A. Chavez

RAYMOND CHAVEZ, CHAIRMAN

Attest:

Jona G. Armijo

JONA G. ARMIJO, SF COUNTY CLERK

APPROVED AS TO FORM:

Norman Osborne

Norman Osborne

County Attorney

692,544

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the 15 day of NOV. A.D. 19 89, at 9:34 o'clock A m. and was duly recorded in book 664, page 699 of the records of Santa Fe County.
Witness my Hand and Seal of Office
Jona G. Armijo
County Clerk, Santa Fe County, N.M.
Joyce Medina
Deputy

COUNTY CLERK
JONA G. ARMIJO
SANTA FE COUNTY NEW MEXICO

CARLOS E. JULIEN - PRESIDENT OF NATIVE PROPERTIES INC., A
PRIVATE REAL ESTATE CORPORATION.
216 CALLE ALAMOSA, ESPANOLA, N.M. 87532
(505) 753-6123

REPRESENTING (SEE COPY OF RESOLUTION, ATTACHED):
THE ESPANOLA VALLEY BOARD OF REALTORS.

SAID ORGANIZATION SERVICES THE STUDY AREA AND ITS MEMBERSHIP IS COMPRISED OF : 1.) LICENSED REAL ESTATE PROFESSIONAL, 2.) NATIONAL & STATE, COMMERCIAL BANKS, 3.) CERTIFIED REAL ESTATE APPRAISERS, 4.) SAVINGS AND LOANS

TOPIC OF TESTIMONY:
PRIVATE PROPERTY RIGHTS AND ECONOMIC IMPACTS, DUE TO THE LACK OF INFRASTRUCTURE.

THE NEED TO SPEAK THE PUBLIC LANGUAGE IS THE MAIN REASON FOR THIS TESTIMONY.
FROM BEFORE ITS INCEPTION I HAVE PERSONALLY BEEN INVOLVED IN THIS PROJECT. DUE TO THE CONTINUING INPUT BY THE PUBLIC WHO ARE INVOLVED WITH REAL ESTATE AND ITS PERIPHERAL BUSINESSES.
I HAVE SPOKEN, AT THEIR REQUEST, TO MANY SERVICE ORIENTED ORGANIZATIONS SUCH AS: THE LOCAL KIWANAS, ROTARY CLUB, AND ECONOMIC ORIENTED ORGANIZATIONS. THEY HAVE ALL AGREED AND REQUESTED THAT THE MASTER PLAN PRESENTED TO THEM AND THE SUBJECT OF THIS TESTIMONY, BE PURSUED TO ITS LIMITS, UNTIL ITS IMPLEMENTATION IS COMPLETE. I AM NOW ATTEMPTING TO CARRY TO YOU THESE TAXPAYERS' BANNER.
THESE ORGANIZATIONS REPRESENTS THE MAJORITY OF THE COMMUNITY LEADERS OF THE STUDY AREA.
THE LACK OF IMPLEMENTATION OF THE MASTER PLAN GIVES RISE TO THE FOLLOWING CONCERNS ON PRIVATE PROPERTY AND EQUAL OPPORTUNITY RIGHTS: (AN UNDERSTANDING OF THE ECONOMIC BASE OF THE STUDY AREA IS A MUST AND THEREFORE THE ECONOMIC DEMOGRAPHICS OF A LARGE PORTION OF THE STUDY AREA IS ENCLOSED. THESE DEMOGRAPHICS ARE TAKEN AND PREPARED FROM THE 1980 SENSUS.)

HOUSING AFFORDABILITY/HEALTH CONCERNS.
A.) LESS THAN 10% OF THE GEOGRAPHICAL AREA IN THE STUDY IS IN PRIVATE HANDS, WITH THE MAJORITY OF THE POPULATION CONCENTRATED WITHIN THAT 10%. THAT TRANSLATES INTO HEAVY ENVIRONMENTAL IMPACT TO THE MINORITY OF THE REAL ESTATE, THAT ALONG WITH SUPPLY AND DEMAND ECONOMICS AT WORK (LARGE DEMAND, LOW SUPPLY).

B.) THE IMPACT OF (A) ABOVE GIVES RISE TO THE NEED OF THE GOVERNMENT'S MANDATE TO PROTECT THE HEALTH AND WELFARE OF ITS PEOPLE. THIS NEED IS IMPACTED BY THE ECONOMIC WOES OF THE AREA, WHICH CAUSES THE NEED TO BE DEFINED AS A NEED TO IMPLEMENT ORDINANCES TO STOP THE BEHAVIOUR OF ITS CITIZENS,

VERSUS THE PROVIDING OF THE NEEDED INFRASTRUCTURE AS A SOLUTION VS A TEMPORARY AND POTENTIALLY UNCONTROLABLE RESTRAINT. THIS NEED TO IMPLEMENT ORDINANCES GIVES RISE TO THE NEED TO ENFORCE SAME, SINCE THE RATE OF VIOLATIONS WILL INCREASE. THE COST OF ENFORCEMENT WILL FAR EXCEED THE ABILITY OF THE AREA TO RETURN THAT COST FROM THE DECLINING TAX BASE OF THE WHOLE AND THE INCREASING TAXATION OF THE MINORITY.

C.) THE IMPACT OF (A) ABOVE GIVES RISE TO THE ACCELERATION OF POLLUTING THE ENVIRONMENT. THROUGH: PARENTS ALLOWING THEIR CHILDREN TO NOW RAISE THEIR FAMILIES WITHIN THE CONFINES OF THEIR SMALL PROPERTIES. THESE PROPERTIES HAVE ANTIQUATED OR IN THE BEST ARE NOT SET UP TO HANDLE THE INCREASE OF POLLUTANTS. THAT CAN ONLY DAMAGE THEIR HEALTH BUT THE HEALTH OF THEIR NEIGHBORS AS WELL. THE ONLY WAY WE CAN SAFEGUARD THE HEALTH OF OUR COMMUNITIES ARE THROUGH THE GOVERNMENTS' MANDATE TO PROTECT THE HEALTH AND WELFARE OF ITS CITIZENS. THE ENFORSABILITY OF SUCH A MANDATE WILL COST MORE MONEY THAN ITS WORTH. IF YOU CONSIDER THE ECONOMIC IMPLEMENTATION OF THE MASTER PLAN VS.. THE CHECKING OF EACH INDIVIDUAL RESIDENCE AND BUSINESS. NOT ONCE BUT ON A REGULAR SCHEDULE.

D.) THE IMPACT OF (C) ABOVE GIVES RISE TO FAMILY DISPUTES DUE TO THE CRAMPNESS INHERENT IN SUCH AN EVENT. THESE FAMILY DISPUTES GIVES RISE FOR THE NEED TO INCREASE PUBLIC SAFETY. AGAIN THROUGH A DETERIORATING TAX BASE. WHICH CAN NOT BE FAIRLY OR EQUITABLY IMPLEMENTED ON THE TAX PAYING CITIZENS.

E.) THE IMPACT OF (C) AND (D) ABOVE GIVES RISE TO OUR YOUTH. LEAVING THE AREA . FOR THE SAKE OF : A BETTER ENVIRONMENT. A BETTER ECONOMIC BASE AND THE PROMISE OF A BETTER FUTURE SOMEWHERE. WHERE THESE PROBLEMS WERE ADDRESSED AND THE SOLUTION TAKEN CARE OF.

F.) THE IMPACT OF (E) ABOVE GIVES CREADANCE TO THE THEORY THAT THE TAX BASE WILL CONTINUE TO DETERIORATE AND THE CULTURE SO RICH AND UNIQUE TO THIS AREA FOR MORE THAN 400 YEARS WILL BE LOST FOR EVER. ALONG WITH THE RURAL WAY OF LIFE.

G.) THE OPPOSITE OF OUR TALENTED YOUTH LEAVING IS. OUR YOUTH STAYING: THE THEORY OF ANYONE STAYING IN THE CURRENT AND EXPECTED ENVIRONMENT MUST BE ANALYZED UNDER THE FOLLOWING REASONS:

1.) THE CULTURE: A PSYCHOLOGICAL ATTACHMENT TO A PERCEIVED COMMUNITY SECURITY.

2.) THE EDUCATION: INSUFFICIENT EDUCATION. DUE TO A NEED TO CREATE INCOME AND THEREFORE INABILITY TO INCREASE THEIR INCOME SOMEWHERE ELSE WHERE ADDITIONAL EDUCATION WOULD BE REQUIRED.

3.) ECONOMICS: INABILITY TO PAY FOR THE MOVE NOW OR IN THE FUTURE.

4.) HEALTH: INABILITY TO LEAVE DUE TO PERSONAL OR FAMILY REASONS.

THE ONLY ONE THAT IN MY OPINION WOULD KEEP OUR YOUTH IS THE CULTURE. BUT AS I STATED BEFORE THAT WILL SOON BE A THING OF THE PAST AS OUR AREA BECOME MORE RELIANT ON GOVERNMENT ASSISTANCE, THAN IN THEIR ABILITY TO TAKE CARE OF THEIR OWN. HOWEVER IF THE PLAN IS NOT IMPLEMENTED AT OUR CURREN RATE OF POLLUTION, HEALTH WILL KEEP EVERY ONE IN THE AREA, BUT NOT ABOVE GROUND.

5.) THE INTENT OF EQUAL HOUSING OPPORTUNITIES AS AFFORDED BY THE FEDERAL GOVERNMENT CAN NOT BE FULLY IMPLEMENTED AND MADE FULLY FUNCTIONAL IN THE AREA OF THE MASTER PLAN, DUE TO THE LACK OF INFRASTUCTURE AS MADATED BY SAID PROGRAMS AND BY OUR CURRENT SUPPLY AND DEMAND ECONOMICS. THAT WOULD ALL CHANGE IF THE MASTER PLAN RECOMMENDATIONS WWERE IMPLEMENTED. THE ABBILITY TO SUPPORT NEWW BUSINESS TO THE AREA WOULD ALSO BE ENHANCED BY IMPLEMENTATION OF THE SUBJECT RECOMMENDATIONS. THE PRIVATE FINANCIAL MARKETS WOULD HAVE THE ABILITY TO OFFER MORE MONEY TO THE COMMUNITY DUE TO THEIR REAL ESTATE LOANS QUALIFYING IN THE SECONDARY MARKET SINCE AN INFRASTRUCTURE ON MOST SECONDARY REAL ESTATE MARKET IS A REQUIREMENT.

SUMMARY: IN SUMMARY: THE CONTINUING INCREASE OF GOVERNMENT COSTS(BASED ON THE MANDATE OF PROTECTING THE HEALTH AND WELFARE OF ITS CITIZENS).DUE TO THE LACK OF INFRASTUCTURE AND DECREASE OF TAXABLE REVENUE OF THE AREA WOULD FAR EXCEED, IN THE LONG TERM, THE CURRENT COST OF IMPLEMENTING THE RECOMMENDED MASTER PLAN.
THE AREAS WHICH WOULD EXPERIENCE THE LARGE GOVERNMENT COST INCREASE ARE:
1.) HEALTH 2.) HOUSING 3.)POLICE 4.) WELLFARE 5.) JUDICIAL

WITH THE IMPLEMENTATION OF THE RECOMMENDED MASTER PLAN THROUGH THE DIRECT ASSISTANCE OF OUR GOVERNMENT, WOULD, ALLOW NOT ONLY THE ELIMINATION OF THE COMING GOVERNMENT COST INCREASES BUT INCREASE THE EMPLOYMENT OF THE STUDY AREA AND BREAK OUR CURRENT UNEMPLOYMENT RATE OF OVER 20%. ALL OF THIS WHILE PROTECTING THE FUTURE OF OUR ENVIROMENT, AND CONSEQUENTLY THE HEALTH AND WELLFARE OF OUR CITIZENS.

RESPECTFULLY SUBMITTED,

CARLOS E. JULIEN
PRESIDENT - ESPANOLA VALLEY BOARD OF REALTORS

Testimony of

LUCY HILGENDORF

President, Western Network

Santa Fe, New Mexico

Presented to the Senate Subcommittee on the Environment

and Public Works

March 14, 1990

Pojoaque, New Mexico

I would like to speak in support of the efforts of the Espanola Valley and Pojoaque Valley Water and Wastewater Steering Committee. I believe it is extremely important for the Committee and the constituents they represent to receive the support they are requesting.

The Master Plan contains all the scientific and technical evidence necessary to support the need for the implementation of the plan as quickly as possible. I would like to speak briefly to the significance of the plan from a different perspective -- that of process rather than substance.

I am a professional mediator and facilitator specializing in cross-cultural and environmental cases throughout the west. I have mediated complex multi-party environmental disputes and facilitated large, controversial public meetings. I have also worked extensively with tribal, state, and Hispanic leadership to improve communication and foster cooperation among those with cultural differences.

Relevant to the topic here today is work I have done which involves protection of groundwater in the state of New

Mexico. I have mediated the development of underground storage tank regulations for the state, as well as revisions to the state liquid waste regulations. I also facilitated the development of a groundwater protection policy for Governor Carruthers through a series of large public meetings and smaller working group sessions.

All of these processes involved a wide range of interest groups -- from environmentalists to industry spokespersons, from community organizers to developers -- and a wide range of cultural identities -- Hispanic, Indian and Anglo.

From all these groups I heard repeatedly the concern for groundwater protection. They urged stricter septic tank regulations, provision of facilities for septage, and systems for keeping separate the diposal of liquid waste and the supply of drinking water.

Because of my professional interest in consensus-building among differing groups, I have followed closely the progress of the Espanola and Pojoaque Valleys Water and Wastewater Committee over the past two years.

In the first public meeting of the committee, someone from the audience reminded those present that these valleys had been locked in bitter conflict for almost 20 years over water rights. Indian, Hispanic and Anglo interests had divided along ethnic lines and animosity had grown to the danger point. Children were throwing rocks at each other at school bus stops, reflecting the hostility they were feeling all around them.

The audience member made sense: "How can you, Governor

Viarrial and your committee, expect to overcome that backdrop of hostility and work together on any subject?"

Smiling, Governor Viarrial told the doubter, "That is one topic we will not discuss here. We are here to build alliances, and get something done."

I saw Governor Viarrial and his committee -- representing all the diverse interests in the region -- follow through in this spirit as the meetings proceeded over the months. The ability of the group to set aside differences and work together has been extremely impressive -- unique as far as I know in the state.

It is clear to everyone that the environmental health of the region requires immediate implementation of this Plan. I want to argue that the social and political health of the region are also at stake. The successful development of a management authority and joint powers agreements among the parties is crucial to mending the multi-cultural fabric of the region.

Here is an opportunity not only to protect precious water resources but to create a model for cross-cultural cooperation. Locally, this model would be proof that there is an alternative to the continued hostility. In other parts of the country, this model could be an inspiration to diverse groups struggling to work together toward a common goal.

I have personally been inspired by the dedication and skill which has brought the Committee to this point. They and their constituents deserve your support to take the next steps.

Thank you for your time and attention.

Espanola Valley & Pojoaque Valley Wastewater Master Plan
US Senate Subcommittee Testimony

Pojoaque Valley Schools has a student population of approximately 1800 students. These students are housed in three different locations and separate campuses. Presently, we have 20 septic tanks, 2 wastewater treatment plants and 7 wells at these locations. Two of these wells have high nitrate contents and presently are not potable.

We are experiencing a 5 percent growth however, there are possibilities of developers coming in and developing in and around the greater Pojoaque area. Following this scenario Pojoaque Schools will see a doubling or tripling of its population within the next decade.

Our new facility at Jacona has a wastewater treatment plant. The school district will be watering 6.0 of SOD with the grey water that is being produced there. We do however have many septic tanks that are presently being pumped by local septic haulers who do not have the septage facilities to dispose of their loads. We ask for your support in the funding of the wasterwater master plan.

1. Senato. Pete Domenici, New Mexico
2. Ernest Vigil, Staff
3. Linda Findley, Staff
4. Senator John Chafee, Rhode Island
5. Barbara Goetz, EPA Region 6
6. Governor Garrey Carruthers, New Mexico

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TESTIMONY TO U.S. CONGRESSIONAL COMMITTEE ON THE
ENVIRONMENTAL AND PUBLIC WORKS
REGARDING THE ESPANOLA VALLEY AND POJOAQUE
VALLEY WASTEWATER MASTER PLAN

My Name is Dennis Kirkwood and I own "Lil Stinker Septic Service". I have been pumping septic tanks and cesspools and restaurant grease traps for nine years in the same area as the Espanola Valley and Pojoaque Valley Wastewater Master Plan includes.

During the nine years I have been pumping septic tanks, only three of those years has a dump site been available for use by septic tank pumpers. The use of this site, the Velarde Landfill, was closed to septage in 1988 when EPA announced its new Regulations for Solid Waste and Liquid Waste Sites. Since 1988, I have been land applying the septage on private land in a safe as possible manner. Dumping septage on private land is not easy to monitor or control. A facility which has monitoring devices in place, proper liners, management policy, security, and Regulations in place to enforce the use of such a facility, is a must if we are to protect our groundwater. As a septic tank pumper and resident of this area, I am concerned about groundwater quality.

The Espanola and Pojoaque Valley Wastewater Master Plan Committee is committed to resolving the problem of degraded ground water and I fully support this endeavor.

Dennis Kirkwood

MARCH 14, 1990
Date

STATEMENT OF SIDNEY L. MILLS, ALBUQUERQUE AREA DIRECTOR, BUREAU OF INDIAN AFFAIRS, DEPARTMENT OF THE INTERIOR, BEFORE THE ENERGY AND NATURAL RESOURCES COMMITTEE, U.S. SENATE, FIELD HEARING ON GROUND WATER CONTAMINATION, POJOAQUE PUEBLO, NEW MEXICO

March 14, 1990

Good morning, Mr. Chairman. I am pleased to be here to discuss the Bureau of Indian Affairs' (BIA) involvement with the Pojoaque and Espanola Valleys Water and Wastewater Master Plan.

Since the conceptual beginnings of a regional wastewater impact study in 1986, the BIA has expressed an interest in supporting the local Pueblos' involvement in a cooperative, multi-governmental agency study of the Espanola and Pojoaque Valleys. It was in this spirit that the BIA provided $5,000 to each of six local Pueblos to fund their cooperation and involvement with the steering committee that evolved into the Espanola and Pojoaque Valleys Water and Wastewater Steering Committee. I wish to commend Governor Viarrial's superb efforts at chairing such a diverse and successful organization. The Federal and State governments should recognize the tremendous strides this diverse steering committee has made toward cooperative environmental protection.

The BIA provided technical review and comment on the Wastewater Master Plan and found it to be a thorough and excellent planning document. The study provides a well-documented basis for an urgently needed Joint Powers Agreement to handle the immediate septage disposal needs of the region, and to handle the future sewage treatment needs of the burgeoning population. All residents of the region have a right to clean drinking water and a right to empower their representatives to protect their threatened and shared water resources.

As indicated in the July 1989, Espanola Valley and Pojoaque Valley Wastewater Master Plan, nitrate contamination in the region is on the increase. There is a real and immediate need for innovative financial and managerial approaches to protect the region's shared water resources. The BIA is committed to continuing support of the steering committee's efforts, and will continue to try to make available hydrologists and engineers for review and comment on the aspects of ground-water and surface-water protection, for the benefit of the Pueblo communities and their neighbors in this Valley.

This concludes my prepared statement. I will be pleased to answer any questions that you may have.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Statement of

Terry L. Christensen
Director, Division of Sanitation Facilities Construction
Office of Environmental Health & Engineering
Albuquerque Area Indian Health Service
Indian Health Service

Before the

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

March 14, 1990

INDIAN HEALTH SERVICE TESTIMONY

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

March 14, 1990

Mr. Chairman & Members of the Committee:

I am Terry L. Christensen, the Director of the Division of Sanitation Facilities Construction, Office of Environmental Health and Engineering, Albuquerque Area Indian Health Service.

I thank you for the opportunity to comment on the need for solutions to groundwater contamination problems in the Espanola and Pojoaque Valleys. The Indian Health Service takes this opportunity to commend the wastewater steering committee under the leadership of Governor Viarrial of Pojoaque Pueblo for the direction and guidance that have resulted in the excellent master plan document. The Indian Health Service expresses support for the general concept of regional sewerage facilities as proposed in the "Espanola Valley and Pojoaque Valley Wastewater Master Plan". As a health agency with specific responsibilities to care for the health of the Indian people, the Indian Health Service has a very acute interest in the issue of groundwater contamination since it directly impacts the health and well-being of the Indian populations of the San Juan, Santa Clara, San Ildefonso, Pojoaque, Nambe and Tesuque Indian Pueblos located within the study and planning area.

The Indian Health Service has authority to provide sanitation facilities for Indian homes, communities and lands and under that authority has constructed community water and sewerage facilities for all six Pueblos in the study

area. These sanitation facilities have demonstrated a significant role in safeguarding and improving the health of the Indian residents in this region. While the results of the wastewater study indicate the contaminated groundwater problem is more serious on non-Indian lands, the movement of groundwater has no regard for reservation boundaries. The Indian Health Service believes the groundwater contamination identified by the study is showing movement into reservation areas and can have a very serious impact on the drinking water supplies of the Indian Pueblos.

On-site wastewater disposal systems, usually in the form of septic tank and drainfield systems, have been identified by the study as the principal cause of high nitrate levels present in many of the wells in the area. Community facilities have been constructed by the Indian Health Service for the Indian Pueblos, therefore, the Pueblos do not have the dense concentration of on-site disposal systems found in many other portions of the study area. This has resulted in less serious groundwater contamination problems on Indian lands than exist in some of the non-Indian areas. This trend demonstrates the need to replace existing overcrowded septic tank and drainfield systems with community sewerage facilities in the area.

The community sewerage facilities serving the six Indian Pueblos in the region all utilize lagoon systems for treatment. While these lagoons have been designed and constructed to previously acceptable engineering standards, some of the older lagoons are unlined and, therefore, may be considered as potential sources of groundwater contamination. Total retention lagoons, where no seepage is allowed, may be impractical in many cases, due to the lack of sufficient land area. Mechanical sewage treatment plants generally prove

too costly for operation by small communities such as the Indian Pueblos where the total population and economic base is small. Regional treatment plants which will serve a larger population and economic base to support the expensive operation and maintenance costs are options which need to be considered. The construction and operation of such community systems have the potential to reverse the current trend of increased groundwater contamination threatening both the Indian and non-Indian drinking water supplies in the region.

The Indian Health Service supports, where economically feasible, the concept of community sewerage facilities and the general concepts of the wastewater master plan. Any new water or wastewater facilities or upgrades constructed by the Indian Health Service on Pueblo lands will proceed with due consideration of the regional master plan and with future anticipated connection to a regional wastewater system.

The Indian Health Service supports the concept of regional treatment facilities as proposed in the master plan and believes they are needed to protect the precious groundwater resource and to reverse the severe groundwater contamination problem in the Espanola and Pojoaque Valleys. These facilities will also provide protection for the long-range health and well-being of not only the Indian population, but all residents of the region.

This concludes my prepared statement, Mr. Chairman. I will be happy to answer any questions you or other members of the committee may have.

New Mexico Health and Environment Department

GARREY CARRUTHERS
Governor

DENNIS BOYD
Secretary

MICHAEL J. BURKHART
Deputy Secretary

RICHARD MITZELFELT
Director

My name is Richard Mitzelfelt, I am the Director of the New Mexico Environmental Improvement Division. Today I am here to testify about ground water contamination affecting the Espanola and Pojoaque Valleys.

Mr. Chairman the environmental problems facing residents of the Espanola Valley and Pojoaque Valley of New Mexico stem from several sources. The most serious and central issue is the accelerating degradation of the ground water supplies. Local ground water is used both as a drinking water source and a sewage disposal system. Given that the amount of ground water is finite, the two uses work against each other.

In the past, human and animal wastes have had little impact on the local ground water quality. This was due to the low population density and the extensive irrigation farming system necessary to support that population. In the last twenty years farming has declined while population and development have increased. Much of the land formerly used for farming has been subdivided into small plots for houses and mobile homes each with it's septic tank-leach field system. The impact of human habitation is now polluting the ground water supplies necessary to support the people.

Today, Mr. Chairman, the pressure of human development has

already exceeded the ability of the environment to assimilate the amount of septic system effluent being discharged into the ground. In the Tesuque and Pojoaque areas the sewage disposal problem is compounded by areas of anoxic ground water conditions. Anoxic contamination is a chemical condition which leaves the ground water deficient in oxygen. It is caused by septic tank discharges or by naturally occurring geologic deposits such as humus or peat. Humus and peat are commonly found in buried river channels like the Rio Grande. While nitrates are not as prevalent, due to the reducing conditions of an anoxic environment, the loading from sewage contributes to the further degrading of the local ground water. Odor (rotten egg smell) and taste problems from iron, manganese and hydrogen sulfide are typical of anoxic ground water. The result is increasing Nitrate contamination and anoxic ground water conditions through out the valleys that is centered around areas of high population density.

The health effects from Nitrate contamination are not completely understood. Since 1945, health professionals have known that high Nitrate levels in drinking water disrupt the normal body processes in some infants. Methemoglobinemia or "blue baby syndrome" occurs when Nitrate is converted to Nitrite in the stomach of infants. The Nitrite acts in the blood to change hemoglobin to methemoglobin, which reduces the ability of the red blood cells to carry oxygen. This is sometimes referred to as "blue baby syndrome" because the infant's skin takes on a bluish tint due to the blood vessels near the skin. The infant suffocates

because oxygen cannot be transported by the blood cells. In 1986 it was reported that a child died due to the effects of methemoglobinemia in South Dakota. Questions have been raised as to whether Nitrates can lead to other health problems such as cancer and birth defects, however definitive studies are lacking. Conditions of severe Nitrate and anoxic contamination are mutually exclusive due to oxidation-reduction (redox) potentials of the ground water.

Organic solvents are a component of many household products. Septic tank degreasing products, in particular chlorinated solvents, are widely used and have caused ground water contamination. Substances like drain and toilet cleaners, bleach, and liquid cleaners are commonly flushed into private septic systems and can easily reach ground water resulting in further degradation.

Septic system effluent is a source of pathogenic bacteria and viruses. Many bacteria and all viruses are small enough to move through soil pores and thus can be leached into ground water. Outbreaks of typhoid fever in Yakima County, Washington have been attributed to bacterial migration. Microbial contamination of ground water supplies has caused outbreaks of shigellosis, gastroenteritis, and viral hepatitis. The potential for similar health problems exists in New Mexico.

The Espanola Valley and Pojoaque Valley Wastewater Master Plan, Mr. Chairman, was developed in an attempt to come to grips with the degradation of local ground water supplies. We at the New

Mexico Environmental Improvement Division (EID), over several years, have generated most of the water quality data compiled in the Master Plan. Given the multitude of political entities, some with independent sovereignty, the problem defies any solution originating solely from EID. The Espanola and Pojoaque Valleys Water and Wastewater Steering Committee is a united front formed to address the problem of environmental degradation. The fact that so many independent political entities, each with their own agendas and priorities, have come to realize the magnitude of the problems facing us all as New Mexicans is heartening. Environmental pollution knows no boundary. The bottom line is that we're all in this together and any solution must reflect this reality. The ground water supply in the Espanola and Pojoaque Valleys must be protected by mutual efforts. Unfortunately the financial resources are no longer available at the State level to properly address the problem. New Mexico is long past the "boom" days of Uranium and oil & gas production. The severe downturn in the resource extraction industries has reduced the amount of severance taxes paid to the State. We are here today to support the case for funding of the Espanola Valley and Pojoaque Valley Wastewater Master Plan. The investment of federal monies now will allow us to act on the water and wastewater problems that face us all. As with most environmental problems the longer we wait the more expensive any remediation efforts will be.

With this in mind the New Mexico Environmental Improvement Division fully supports the Espanola Valley and Pojoaque Valley

Wastewater Master Plan recommendations. It is far-sighted both politically and environmentally and may well prove to be the model for confronting similar problems in New Mexico and the rest of the country. We are committed to cooperating with the local communities and the Federal government to arrive at a successful resolution of the problems facing us all in the Espanola and Pojoaque Valleys.

Mr. Chairman, thank you for the opportunity to provide testimony. Thank you for providing this hearing so that local input can be given. If the New Mexico Environmental Improvement Division can be of any further assistance to this hearing process, please do not hesitate to contact me.

Testimony by Charles Nylander
Los Alamos National Laboratory

Concerning the Espanola and Pojoaque Valleys
Wastewater Master Plan

Before the United States Senate
Committee on Environment and Public Works

Pojoaque, New Mexico
March 14,1990

I appreciate the opportunity to appear before the United States Senate Committee on Environment and Public Works representing Los Alamos National Laboratory's support of the Espanola and Pojoaque Valleys Wastewater Master Plan.

The Laboratory has enthusiastically supported the development of this Master Plan because many of our employees and the employees of numerous support contractors, reside in the Espanola and Pojoaque areas. Likewise, because the Laboratory is located in the common watershed of the Upper Rio Grande, and shares environmental concerns with all of our neighbors, this Master Plan deserved our support. Throughout its existence, the Laboratory has steadfastly maintained a commitment to protection of the health and safety of our employees, and our Northern New Mexico neighbors as well, and strongly advocated environmental protection regarding the impacts of our operations. Although we are located "downstream" from the Master Plan study area, this same study area is of concern, as evidenced by our routine collection of environmental data in the study area under our long-term environmental surveillance program.

The Laboratory was invited to participate on the Steering Committee for the Wastewater Master Plan in order to provide technical assistance in developing the scope of work, selecting a contractor, and in reviewing the Plan. The Laboratory also assisted in the printing of the final report and will be assisting the Steering Committee in the preparation of a videotape describing water quality concerns in the study area and solutions presented as recommendations in the Master Plan.

The strength of the Espanola and Pojoaque Valleys Wastewater Master Plan is that the wastewater disposal needs of each community in the study area was investigated separately with regard to its present pollution problems and unique environmental characteristics. Under the Plan, the

recommended facilities for each community would be designed in such a way that they could be tied into two central treatment facilities at some time in the future when appropriate. The key to improving ground water quality in the Espanola and Pojoaque Valleys is that overall coordination and management begin now as outlined in the Master Plan.

It has been the Laboratory's privilege to serve as a member of the Steering Committee, and provide technical assistance for such a worthwhile endeavor. The Chairman and membership of the Steering Committee have done a unique and outstanding job of producing this Master Plan. Again, thank you for this opportunity to express support for the Espanola and Pojoaque Valleys Wastewater Master Plan.

STATEMENT OF
KENTON KIRKPATRICK
DEPUTY DIRECTOR, WATER MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6
BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
POJOAQUE, NEW MEXICO
March 14, 1990

Good morning. My name is Kenton Kirkpatrick, and I am the Deputy Director of the Water Management Division of Region 6 of the Environmental Protection Agency. I am very pleased to be given this opportunity to discuss with you one of our most important environmental concerns -- protection of ground water resources. Protection of ground water in New Mexico is of particular interest to us because of the strong dependence of our citizens, agriculture, and industry in the State on ground water. Approximately 87% of the population depends on ground water for drinking water. The State's geology renders the limited ground water supplies vulnerable to contamination, therefore, its protection is most important.

Among EPA's many new initiatives is a Ground Water Task Force chaired by Deputy Administrator F. Henry Habicht. The Task Force's first accomplishment is a statement of principles clarifying the Agency's approach to ground water protection. We believe the goals of EPA's emerging ground water policy should be to prevent adverse effects to human health and the environment

and to protect the environmental integrity of the nation's ground water resources. Pursuing these goals will help sustain the resource and any critical eco-systems it supports, not merely for the near term, but for the future as well.

What I plan to do this morning is to discuss EPA's ground water program and provide specific information concerning Region 6's activities in the Espanola Valley.

Ground water protection is one of our more complex issues, cutting across economic sections, all levels of government, and most of our Federal environmental statutes.

The concentrations of contaminants released to ground water often have very limited opportunity to be reduced through dilution or mixing with waters. Indeed, the adsorption of contaminants or transformation to different contaminants underground is difficult to assess accurately. In addition, ground water is difficult to monitor. Taking a ground water sample may require drilling a well, and the information obtained from that sampling point may be significantly different from that collected a short distance away. Ground water contamination is caused by discharges from a wide variety and number of sources, including improperly managed underground storage tanks and hazardous waste landfills, agricultural practices, septic tanks, and many others. From experience, we know that, once contaminated, cleaning up ground water is in most cases very expensive or impractical.

Since 1984, the Agency has made significant strides in protecting the resource, both in implementing ground water related statutory authorities and in new EPA initiatives in this area. In addition, because of the localized nature of ground water problems and solutions, we recognize that the States need to have the lead responsibility in this issue. The States have been moving ahead rapidly in developing their own ground water protection strategies and wellhead protection programs.

Some of our most significant achievements and current efforts have been in addressing the concern for agricultural chemical impacts on ground water under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

We know that numerous day-to-day activities, including pesticide applications, can result in low-level contamination of ground water resources.

EPA has underway a number of activities to address pesticides in ground water. For example, EPA evaluates new and previously-registered pesticides for ground water contamination potential. For previously-registered pesticides, EPA continues to review environmental fate data submitted on 140 pesticides through a special Data Call-In.

Based on these and other data the Agency will decide whether to use nationally applicable restrictions to regulate pesticides posing widespread, national concerns.

The Agency is also taking a number of actions to obtain better nationwide pesticide contamination data. First, EPA's

National Pesticide Survey will determine both the frequency and level of pesticide and nitrate concentrations in domestic and community drinking water wells, and it will investigate how pesticide and nitrate concentrations in wells are associated with agricultural activities and ground water vulnerability near those wells. EPA is currently monitoring 127 substances in approximately 560 community water system wells and 750 private household drinking water wells. We hope to have a preliminary report of the monitoring results in the fall of 1990 and a draft final report a few months later.

In addition, EPA administers extensive ground water protection and clean up activities under other statutes.

Under the Toxic Substances Control Act (TSCA), EPA has reviewed approximately 15,000 submissions for new chemicals since 1979 to identify potential risks before these substances enter the market place, and EPA has imposed appropriate restrictions. EPA has screened approximately 4,000 existing chemicals over the past ten years. During these reviews, EPA has considered a variety of factors including the potential for ground water contamination.

Under the Resource Conservation and Recovery Act (RCRA), EPA regulates the management of hazardous waste in a manner protective of human health and the environment. In New Mexico, the New Mexico Environmental Improvement Division (EID) is authorized to operate the RCRA program. A centerpiece of the RCRA program is the ground water protection regulations that

require all hazardous waste treatment and disposal units to regularly monitor ground water and to immediately clean up any releases of contaminants that may be detected from those units.

The Underground Storage Tank (UST) program has authorized EPA to establish: new tank performance standards; requirements for release detection, reporting, and investigation; corrective actions; tank closures; and financial responsibility rules. This program has placed a major emphasis on building dynamic, effective State programs, including ground water contamination clean up programs.

Through the Superfund program, EPA placed 974 hazardous waste sites nationwide on the National Priority List (NPL) with a proposed addition of 220 sites. EPA has begun work at 81 percent of these NPL sites, including making clean up decisions at 267 Superfund sites, and deleting 28 sites that no longer present a risk. We have evaluated 14 sites in the Espanola area. Nine sites require no further remedial action and five sites are under additional review.

The Safe Drinking Water Act and the National Primary Drinking Water Regulations apply to all water systems serving 25 or more people. The Act allows EPA to authorize States and Indian Tribes to administer their own public water supply supervision programs. EPA granted primary enforcement responsibilities to New Mexico in 1978 to operate a Public Water Supply Supervision Program for the State. No Indian Tribe has yet been granted primacy in New Mexico; therefore, EPA directly

implements the drinking water program on Indian lands within the State.

As part of this program, tribes are required to collect routine water samples to insure their drinking water meets current standards. To facilitate implementation of the drinking water program, we negotiated an agreement with the city of Espanola's Water and Wastewater Laboratory to provide bacteriological sample analysis for the northern tribes. Since the original agreement in 1985, a total of $25,000 has been awarded to Espanola for these services. This agreement has been beneficial to all parties involved and illustrates the cooperative nature of the Public Water Supply Program in that it involves Espanola (which operates the laboratory), the State of New Mexico (which certifies laboratories), Indian tribes (sample collectors), and EPA (funding).

The close proximity of the Espanola laboratory to the tribes minimizes travel time and permits rapid turnaround of sample results. We are pleased to say that none of the tribal wells in the Espanola area have shown bacterial contamination. However, if one were to be contaminated, the monitoring program made possible through the Espanola laboratory would allow rapid detection and confirmation. All water quality sampling tends to make well owners more aware of the vulnerability of their wells to contamination.

Volatile Organic Chemicals (VOC's) comprise another group of contaminants for which public water systems must sample. Samples

collected by the State from two City of Espanola wells showed contamination by trichloroethylene and tetrachloroethylene, solvents normally used in small plants or industrial cleaning operations. Both wells were removed from service immediately. The State estimates that there are at least 25 possible contamination sources near these wells.

All tribal public wells were sampled for VOC's by tribal operators, the Indian Health Service and EPA in 1987. No VOC's were detected in any tribal wells. EPA provided the laboratory resources for this effort and provided copies of the reports to tribal leaders.

EPA is in the process of establishing new or revised regulations covering a large number of additional drinking water contaminants. In addition, the Agency has issued in proposed or final form 144 drinking water health advisories.

EPA has also established regulations to protect underground sources of drinking water from contamination by injection wells and is now developing regulations for additional categories of injection wells.

Furthermore, under the Safe Drinking Water Act (SDWA), approximately thirty States have developed and submitted State Wellhead Protection programs for EPA approval, having received significant technical assistance from EPA in many cases. The New Mexico Environmental Improvement Division proposed a shallow injection well initiative for Espanola to identify all potential sources of contamination within the designated wellhead

protection area for each of the ten wells comprising the public water supply system for Espanola, including shallow injection wells and underground storage tanks. Types of wells include commercial or multi-family septic tank systems, service station sumps, cesspools, hazardous waste shallow injection systems, and unauthorized use of abandoned water wells for waste. The project proposal will also coordinate with local government officials for the establishment of wellhead protection areas and development of pollution control strategies, applicable not only for the city of Espanola but also for other parts of the State.

The project proposal has been reviewed and approved by our Headquarters office and a Review Committee within EPA. FY90 underground injection control add-on funds are being allotted to Region 6 to fund the project. Funds should be available to the Region during the first half of the month of March.

As I stated earlier, the overall goal of EPA is to prevent adverse effects to human health and the environment and to protect the environmental integrity of the nation's ground water resources. This goal is essential to achieve the sustainability of the resource and any critical ecosystem it supports, not just for the near term, but for the future as well. In addition, because ground water clean up is extremely difficult and costly, and in some cases impossible to achieve, EPA's objective is to emphasize prevention of pollution whenever possible. We recognize that, in determining an appropriate prevention and protection strategy, we must also take into

account the use, value, and vulnerability of the resource, as well as social and economic considerations.

According to the New Mexico Ground Water Protection Strategy and the New Mexico draft 1990 biennial water quality inventory report, nitrate contamination and anoxic conditions in several areas of Espanola Valley have been caused by household septic tanks and cesspools. These documents also note that some cases of gasoline contamination have occurred. These reports also state that there is illegal dumping of sewage because of the lack of sound sewage disposal facilities.

It appears that more serious ground water contamination can be prevented if appropriate safeguards are implemented. A number of rural areas, however, are currently undergoing rapid development with private wells and septic tanks upon minimal lot sizes and this may add to ground water contamination problems.

The State's wellhead protection activities note that coordination and jurisdictional questions between State agencies and tribes or pueblos are difficult. The lack of coordinated water policies in the checkerboard area (Indian and non-Indian lands) has led to urban sprawl and a proliferation of individual sewage systems causing very serious ground water pollution in the Espanola area. The city of Espanola is currently proposing to build a regional wastewater treatment plant, which would include Santa Clara Pueblo. The Pueblo's cooperation is essential if the wastewater treatment plant is to be built. Therefore, the steering committee for the Espanola Valley and Pojoaque Valley

Wastewater Master Plan is important with its representatives from six pueblos, three counties, the State EID, and several other entities.

With regard to EPA funding for wastewater treatment facilities, in the four counties in the Espanola area, EPA has funded 16 wastewater treatment projects and has provided approximately $34 million in grant funds since 1972. The primary purpose of these projects has been to correct surface water pollution; however, ground water has also benefited.

A design/construct (Step 2+3) grant is currently active in the Pueblo of Pojoaque although the grantee is one year behind schedule with the design work.

New Mexico has been very quick to react to the provisions of Title VI of the Clean Water Act in setting up a State Revolving Fund. The State Revolving Fund, a loan program with seed money from EPA but managed and administered by the State, has funds available for wastewater treatment works construction in local communities. In accordance with the Act, the State has opted to transfer its Title II construction grants allocation to the State Revolving Fund, and no new construction grant awards will be made. We have been advised by the New Mexico Environmental Improvement Division that the city of Espanola has applied for a loan to construct an expansion to its wastewater treatment facility.

The Indian tribes in the area were not listed on the National Project Priority List for funding in the first round of

grants under the Indian Set-Aside Program [Section 518(c) of the Clean Water Act]. On January 25, 1990, our Headquarters sent a letter to every known Indian tribe in the Nation advising that applications for priority ranking in the second funding cycle must be received by May 1, 1990, in the appropriate regional office.

In addition, the Eight Northern Indian Pueblos Council has forwarded to EPA a proposal for treatment as a State under SEction 518(e) of the Clean Water Act. If approved, the Council could receive EPA funds for water quality planning tasks in the Espanola Valley. Activities included in the proposal are inventorying water quality data in the area, initiating a water quality monitoring program, developing water quality standards, and developing septic tank design and construction standards. EPA is reviewing the proposal.

Additional state ground water program activities of interest are funded under Section 106 of the Clean Water Act. These activities are typically generic in nature with statewide application and/or interest, like the Water Fairs and information outreach tasks carried out by EID.

Because of the complex nature of ground water, clean up and protection of the resource requires that each level of government know and understand its roles and responsibilities and that each of us act appropriately in a partnership fashion. This concludes my formal remarks, and I will be glad to answer any questions you may have.

TESTIMONY OF THE HONORABLE DENNIS P. MARTINEZ,

GOVERNOR, PUEBLO OF SAN ILDEFONSO

Before the Senate Sub-Committee on Public Works & Environment
Senator Pete V. Domenici, Presiding

Hearing held at the Pojoaque Pueblo, March 14, 1990

Senator Domenici, Committee Members and Staff, Pueblo officials, other representatives, and ladies and gentlemen:

Thank you very much for the opportunity to present testimony in support of the Espanola Valley and Pojoaque Valley Waste Water Master Plan recommendations to fund septage treatment facilities in the two valleys.

I am Dennis P. Martinez, Governor of the Pueblo of San Ildefonso. On behalf of the Pueblo I wish to speak in support of the Espanola Valley and Pojoaque Valley Waste Water Master Plan (which I will call "Master Plan").

The Pueblo of San Ildefonso rests at the downstream end of both the Espanola Valley and the Pojoaque Valley. Our Pueblo people maintain themselves now at the same location as our ancestors have been for many, many centuries. The findings of the Master Plan confirm what we at the Pueblo have known for years. The water our people need for living is getting contaminated. Some contamination comes underground into our wells that provide drinking water for our domestic uses. Other contamination comes from illegal dumping of septage into isolated arroyos or irrigation ditches. The highly concentrated sludge can be so strong that it hurts our land and fields. Of course, some of that water seeps below the surface and adds to the groundwater pollution.

The Master Plan provides good suggestions for steps to solve these water quality problems. The specific first step of building two septage treatment facilities, one for the upper Espanola Valley, and one for the Pojoaque Valley, enjoy the support of the Pueblo of San Ildefonso. Our Tribal Council has been informed on the contents and recommendations of the Master Plan. Their support for the recommendations was unanimous.

The Master Plan represents the result of an extraordinary and unusual local cooperative effort. That cooperation, in itself, has been very positive. As the report states, the physical problem of water quality pollution, especially sewage and septage treatment, does not respect political boundaries. The cooperative efforts of the six Indian Pueblos affected, together with the City of Espanola and the others within the Espanola and Pojoaque Valleys provides

real hope that the problems we have recognized together can be solved together.

The recommendations set out in the Master Plan need to be implemented. We can, and should, build on the foundation of our cooperative efforts to date. The approach proposed in the Master Plan recognizes tribal sovereignty of our Pueblo, and invites us to continue using our community sewage system and its lagoon facility, and does not require our Pueblo to go further than we wish to go. Nevertheless, the Pueblo of San Ildefonso has a long standing commitment to protecting a quality environment for our future generations. We see the value of cooperating fully with our neighbors to prevent dumping, both of solid waste and of septage, and keeping water quality as high as possible.

As Governor of the Pueblo of San Ildefonso, and on behalf of our Tribal Council and our people, I urge this Sub-Committee, and the Congress of the United States to support the Master Plan funding request for septage treatment facilities. Our Pueblo is prepared to enter into appropriately negotiated joint powers agreements with the other jurisdictions to implement the recommendations in the Master Plan. We envision cooperating together within a regional authority that would license septage haulers and prosecute violators. The joint powers agreement would recognize tribal jurisdictions and resolve questions of enforcement on Pueblo lands so that septage haulers would stop illegal dumping and use the regional septage treatment facilities.

On behalf of the Pueblo of San Ildefonso, I urge this Committee and other appropriate government entities to make funds available to assist our local cooperative effort to improve waste water treatment in our valleys. Government investment will allow the cost of treatment to be reduced, compared to what it would cost to borrow funds for the entire project. Lower fees will translate into greater compliance by septage haulers. Senators, I am sure you share our desire for a cost-effective solution to our waste water contamination problems. An appropriate federal investment, together with the united support from local, regional, and state levels, will meet the federal goals set forth in the Clean Water Act, as well as our regional and local desire to continue the high quality of life provided in our region of New Mexico.

Thank you for your attention to this important matter. Please support the funding request made in the Master Plan. We do appreciate the opportunity to present testimony to your Sub-Committee, and hope the Congress of the United States will heed our words.

Respectfully submitted,

Dennis P. Martinez, Governor
Pueblo of San Ildefonso

March 14, 1990

To: U.S Senate Environment and Public Works Committee

Mr. Chairman and Members of the Committee,

My name is Joe Fidel Trujillo. I am the Vice-President of the Chamita Mutual Domestic Water Consumers and Sewage Works Association. I also represent Chamita on the Pojoaque-Espanola Wastewater Master Plan Steering Committee.

The community of Chamita is located approximately two miles northwest of San Juan Pueblo along N.M. Highway 74. The population of the community is approximately 1500. The community was first settled in 1724 by Antonio Trujillo.

As some of you know, our community has a severe problem of underground water pollution. In 1987 the State Environmental Improvement Division tested 129 private wells in our community for nitrate pollutants. Of the 129 wells tested, 70 tested above the safe drinking standard of 10 mg/l. The nitrate levels on some of the wells are as high as 70 mg/l. Since one well sometimes serves several families, those 70 wells represent approximately 110 families. Since 1987 those 110 families have been hauling drinking water from some other source. It is not a very good feeling when you cannot go to your kitchen sink and pour yourself a drink of water or use that water for cooking.

With the help of the State Legislature and the FmHA, we are constructing a domestic water system which will provide safe drinking water for our residents. We hope to have our system

in full operation sometime in the next twelve months. We realize however, that it is a short term solution and that we must proceed to try and stop the polluting and clean-up the underground water source. The Environmental Improvement Division (EID) of the State of New Mexico has determined that the source of the nitrate pollutants are the numerous septic tanks and leach fields used for waste-water disposal.

The recent study done for the Pojoaque-Espanola Wastewater Master Plan Steering Committee shows that numerous communities in the study area are faced with the same problem as our community of Chamita. We have joined the committee in hopes that someday a regional wastewater treatment facility can be constructed to serve the entire study area. The entire study area is faced with essentially the same problem so it makes sense to join forces and solve the problem together. The cooperation between the different entities represented on the committee has been tremendous and if the committee report is implemented it will be more economical than each entity constructing a facility.

Our community has also experienced first hand the problem of disposing of septage collected from septic tanks by owners of Septic Pumping Services. During the summer of 1988, the owners of a local Septic Pumping Service applied to the EID for a permit to construct two unlined lagoons in our community to dispose of septage collected from septic tanks. Thru the procedure allowed by the EID for public input, we voiced our concerns about the possibility of further pollution of our underground water source. The EID imposed rigid specifications on the construction of the lagoons. The owners found that it

was to expensive to meet the specifications and abandoned the idea. We were very much relieved.

The fact remains however, that all of us that rely on septic tanks and drain fields, must at one time or another request the services provided by the septic pumpers. It is not illegal to pump the contents of a septic tank into a holding tank mounted on back of a truck. In the whole study area there is no legal place to dispose of that load. Consequently that load is dumped in the nearest irrigation ditch, river, or arroyo. As a member of our local ditch commission, in 1989, I received numerous annonymous calls that our irrigation ditch was full of septage. I observed the same on several occasions. Needless to say it was not the smell of a healthy situation.

The report for the Pojoaque-Espanola Wastewater Master Plan Steering Committee also addresses the problem and proposes the construction of two septage disposal facilities for the study area. Those facilities are desperately needed and they should be constructed as the first phase in the effort to deal with water pollution in the study area.

I wish to thank the Congressional Committee for allowing me to provide written testimony on the subject of water pollution in the Pojoaque-Espanola, New Mexico area. If I can provide any other information, answer any questions, or be of any other assistance, I would be glad to do so.

Thank You,

Joe Fidel Trujillo

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